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ABSTRACT

This guide offers a closer look at Paraguay as a landlocked republic in the heart of South America. The activities emphasize the interaction between the people and their land and pertain to three academic levels. Activities for grades 3-5 include: (1) "Packing for Paraguay"; (2) "Where in the World Are We Going and How in the World Will We Get There?"; (3) "Now Boarding for Departure"; (4) "Getting There is Half the Fun"; (5) "Sights Along the Way: A Field Guide to Wildlife in Paraguay"; (6) "A Day in the Life"; and (7) "Aleluya!" Activities for grades 6-9 include: (1) "Destination: Paraguay"; (2) "Testing the Waters"; (3) "Paraguay's Blending of Cultures"; (4) "Agriculture in Paraguay"; (5) "School Life in Paraguay"; and (6) "Source of Power." Activities for grades 10-12 include: (1) "Land of the Rivers"; (2) "Viewing the Video"; (3) "Nueva Minneapolis?"; (4) "Deforestation in Paraguay"; (5) "Compulsory Democracy?"; and (6) "Tales of the Chaco." The six basic themes of geography serve as the essential organizing structure of the units. Each activity is coded by number to the geography standards to which it best relates and is presented in five sections: (1) focus; (2) resources; (3) background; (4) activities; and (5) extension. Activities can be adapted for the needs and interests of different students. (EH)

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Destination: Paraguay Study Guide

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About this Guide

Destination: Paraguay offers a closer view of this land of rivers, a landlocked republic in the heart of South America. A small nation, Paraguay shares borders with the continent's two largest countries, Brazil and Argentina. Paraguay's history and culture have been shaped by its geography. The activities in this guide emphasize the interaction between the people and their beloved land. Most can be adapted to the study of any country and culture.

The activities in this guide have been grouped into three academic levels: grades 3-5, grades 6-9, and grades 10-12. The six basic themes of geography serve as the fundamental organizing structure of the units. The themes and the national geography standards based on each are found on page 2 of this guide. Each activity is coded by number to the standards to which it best relates.

Each activity is presented in five sections.

- Focus: a brief summary of the subject matter of the unit; number references to relevant geography standards to which it most clearly relates.
- Resources: a listing of related worksheets, handouts and/or maps (to be found in the back pages of this guide); other needed materials.
- Background: additional information about the topic under investigation.
- Activities: a variety of exercises for the students.
- Extension: specific ideas for relating the activities in this guide to the class' correspondence with its own Peace Corps Volunteer, whether he or she serves in Paraguay or in another country.

For the best use of the material in *Destination: Paraguay*, please read through all the activities. Those activities designed for one grade level often can be adapted for another or for the needs and interests of different groups of students. Upper grades may find the supplementary background information provided for the lower grades beneficial, and vice versa. Use the table of contents for a quick orientation to this guide.

This study guide has been developed for use by teachers and students participating in the Peace Corps World Wise Schools program. The study guide series is designed to enrich the class's correspondence with its Peace Corps Volunteer and to help students develop a deeper understanding of regions and cultures different from their own.

Evaluation and revision remain ongoing at World Wise Schools, so your feedback will be received gratefully. What worked? What didn't work? What do you want more of? Less of? Got any nifty ideas to share?! Please let us know.

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Information for Teachers

Peace Corps

Peace Corps was created when President John F. Kennedy issued an Executive Order on March 1, 1961. Since that time, Volunteers have helped people in other countries develop their skills to fight hunger, disease, poverty, and lack of opportunity. In return, Volunteers have seen themselves, their country, and the world from a new perspective.

Peace Corps, seeking to promote world peace and friendship, has three goals:

1. To help the people of interested countries meet their needs for trained men and women;
2. To help promote a better understanding of the people of the United States on the part of the people served; and,
3. To promote a better understanding of other people on the part of the people of the United States.

Since the first group of Volunteers arrived in Ghana, West Africa, in 1961, over 140,000 United States citizens have served as Peace Corps Volunteers in more than 100 countries. Although programs vary from country to country based on the nation's needs and requests, Volunteers traditionally offer skills in the areas of education, agriculture, business education, community development, natural resources, and health. Recent program additions have included environmental education, special education, and the development of programs aimed at improving the status of women and their families. Before placement at their sites, Volunteers receive training in the language and culture of their host countries, as well as in specific technical skills. Cross-cultural training, which includes the study of the history, customs, and values of the host country, prepares Volunteers to become part of a local community for the duration of their two-year service.

Today, almost 6,500 Peace Corps Volunteers are working in over 90 countries around the globe. Although the average age of Volunteers in 1961 was 22, today it is approximately 31; in fact, one out of eight current Volunteers is over the age of 50. By living and working within their local communities, Peace Corps Volunteers not only learn about the people of their host country but also offer people around the world a chance to learn first hand about the people of the United States.

Volunteers also care about carrying out the third goal of Peace Corps: teaching citizens of the United States about the people and cultures of their host countries. World Wise Schools promotes the third goal of Peace Corps by matching current Volunteers with third through twelfth grade classes throughout the United States in an information exchange. Begun in 1989, the program promotes geographic and cross-cultural awareness while developing the spirit of volunteerism. Today almost 4,000 classes from all 50 states are enrolled in the program.

When Peace Corps Volunteers return from overseas, they bring an intimate knowledge of other peoples and cultures. They understand that the ability of the United States to function in the world community depends on its understanding of other cultures. They know that global interdependence is a reality, not just a catchword. When Volunteers share their experiences with their World Wise classes, they help others to fashion a broader world view.

National Geography Standards

Reprinted with permission from: de Souza, Dr. Anthony R., Executive Director. *Geography For Life: National Geography Standard 1994*, Washington, DC: National Geographic Society, Geography Education Standards Project, 1994.

The World in Spatial Terms

Geography studies the relationships between people, places, and environments by mapping information about them into a spatial context. *The geographically informed person knows and understands:*

1. How to use maps and other geographic representations, tools, and technologies to acquire, process, and report information from a spatial perspective.
2. How to use mental maps to organize information about people, places, and environments in a spatial context.
3. How to analyze the spatial organization of people, places, and environments on Earth's surface.

Places and Regions

The identities and lives of individuals and peoples are rooted in particular places and in those human constructs called regions. *The geographically informed person knows and understands:*

4. The physical and human characteristics of places.
5. That people create regions to interpret Earth's complexity.
6. How culture and experience influence people's perceptions of places and regions.

Physical Systems

Physical processes shape Earth's surface and interact with plant and animal life to create, sustain, and modify ecosystems. *The geographically informed person knows and understands:*

7. The physical processes that shape the patterns of Earth's surface.
8. The characteristics and spatial distribution of ecosystems on Earth's surface.

Human Systems

People are central to geography in that human activities help shape Earth's surface, human settlements and structures are part of Earth's surface, and humans compete for control of Earth's surface. *The geographically informed person knows and understands:*

9. The characteristics, distribution, and migration of human populations on Earth's surface.
10. The characteristics, distribution, and complexity of Earth's cultural mosaics.
11. The patterns and networks of economic interdependence on Earth's surface.
12. The processes, patterns, and functions of human settlement.
13. How the forces of cooperation and conflict among people influence the division and control of Earth's surface.

Environment and Society

The physical environment is modified by human activities, largely as a consequence of the ways in which human societies value and use Earth's natural resources, and human activities are also influenced by Earth's physical features and processes. *The geographically informed person knows and understands:*

14. How human actions modify the physical environment.
15. How physical systems affect human systems.
16. The changes that occur in the meaning, use, distribution, and importance of resources.

The Uses of Geography

Knowledge of geography enables people to develop an understanding of the relationships between people, places, and environments over time—that is, of Earth as it was, is, and might be. *The geographically informed person knows and understands:*

17. How to apply geography to interpret the past.
18. How to apply geography to interpret the present and plan for the future.

Paraguay: An Overview

The Land

Paraguay has been called "an island surrounded by land." A unique culture and an independent, generous and proud people developed here, in the heart of the South American continent. In landlocked Paraguay, bordered by mighty rivers and surrounded by larger neighbors, geography has played an enormous role in history, has helped to shape the culture, and continues to mold the country's future.

With its area of 157,047 sq. mi. (or 406,752 sq. km.), Paraguay is one of the smallest countries of South America. It shares borders with Brazil, Argentina and Bolivia (the only other landlocked country on the continent).

One interpretation says that the name, Paraguay, means "the place with the great river." Other possible meanings are "river that begins the sea," "crowned river," or "tail of the sea." Even in name, Paraguay's river resources are memorialized, as is the constant quest of its people for an outlet to the sea. Three rivers form four-fifths of the country's borders, provide well-used transportation routes, and divide its two major climactic zones: the fertile and cultivated lands of the east and the hotter scrub lands of the Chaco in the west. These three major rivers are the Paraguay, the Paraná (pah rah NAH), and the Pilcomayo (pil ko MY yo). This river system connects Paraguay with the Río de la Plata in Argentina, giving the country access to the Atlantic Ocean. In addition, a series of three hydroelectric dams built along the Paraná River will soon make Paraguay the largest exporter of electricity in the world.

Writer Helio Vera calls Río Paraguay the "liquid spinal cord of my country." This river separates the nation into two distinct regions. Fertile red earth fields and pastures, cone-shaped hills, and lush subtropical forests are found in the east. To the west are the plains of the Chaco, a harsh area of dry scrub forest and swamps, of floods, drought, high winds and hot temperatures. Not surprisingly, most of Paraguay's urban centers and most of its population are found in the more temperate east. Although the Chaco covers 60% of the country's area, only 2% of its 4.8 million people live there. Thus the Chaco has a population density of only 2 people per square mile!

In the Chaco, military installations, cattle ranches, indigenous people and Mennonites share a vast area. In the long tradition of vaqueros in Mexico and cowboys in the western U.S., gauchos work the cattle. Sandra Dibble, writing in *National Geographic* (August 1992) described the area vividly: "The temperature can reach 110 degrees F every day for weeks. Some years it doesn't rain for months. Chaqueños [residents of the Chaco] will tell you how the wind blows, the groundwater is salty, the mosquitoes bite, the grass is bitter, the brush is filled with poisonous snakes. They'd never live anyplace else." She goes on to quote one resident: "'You fight with the climate, you fight with the land, and you get something for your fight. You don't get that in eastern Paraguay.'"

Forested areas once covered most of the eastern half of the country and remain its distinguishing feature, but they are being cut at a rapid rate. Some estimate that Paraguay's forests could disappear within the next ten years, as more land is cleared for cultivation and wood is harvested for fuel and for valuable hardwood exports.

Natural Resources

The country has few mineral resources and little manufacturing and, to date, no oil has been found. Historically, fertile farmland and lush forests have been Paraguay's greatest resources. Now the tremendous output of hydroelectric power by the Itaipú (ee tie POOH) Dam, which is far beyond even the estimated future needs of Paraguay, should help to secure a solid economic base for the nation.

Realizing the potential of the country's hydroelectric power has not been without cost. In addition to the monetary outlay, nearly 25,000 Paraguayans had to be relocated. Ciudad del Este (see YOU dod del est)

(once known as Puerto President Stroessner), the Paraguayan city closest to the dam's construction, grew nearly 400% in just 6 years. This brought with it problems in providing housing, education and basic services. Jobs were plentiful during the actual construction phase, but the subsequent job market in the area was inadequate for this massive population influx. Brazil and Paraguay both had to consider influences of the project on the ecosystems in the area, analyze possible changes in climatic effects and/or seismic activity, and deal with health issues (such as a clean water supply and the increase of water-borne bacteria). A computer-based ecological warning system has been in place since 1981 at Itaipú.

In addition to supplying basic needs for electricity among Paraguay's population and providing a valuable commodity for export, Itaipú and other proposed dam projects are expected to supply power with which to develop new industries.

Climate

Because of its location south of the equator, Paraguay's winter falls in July and August; its summer in January and February. Its subtropical climate is similar to that of south Florida, with high humidity, abundant rainfall and moderate temperatures. The average winter low in Asunción, the capital city, is 65 degrees F (18.3 C). Frost occurs occasionally, but snowfall is extremely rare. Still, the dampness makes the air feel chilly in winter, and most people are glad to have wool clothing and blankets. In summer, temperatures in the capital average 85 degrees F (28.8 C), but sometimes reach as high as 110 degrees F in the Chaco. Rainfall can occur in any month, and heavy amounts cause serious difficulty for travellers, due to flooding and the impassability of many unpaved roads.

Flora and Fauna

The climate and terrain support a wide variety of trees, including the lapacho, which flowers in brilliant pink or yellow during July and August. The humid forests of the east are similar to rain forests, where mosses, ferns and bromeliads grow densely and can be difficult to penetrate. A number of hardwood trees, such as acacia and cedrela, thrive there. In the western Chaco, palms, water hyacinth, spiny bushes and the unusual palo borracho grow abundantly. The palo borracho, also called the bottle tree or drunken tree, has a leaning, bulbous trunk that conserves water during dry weather.

A large variety of birds and animals are found in Paraguay. Birds include the rhea (resembling an ostrich), many species of hummingbirds and hundreds of varieties of water birds, such as storks, herons and egrets. Tropical birds such as toucans, parrots, parakeets and macaws are found in the forests. Among the animal species which make their homes in the area are jaguars, crocodiles, monkeys, armadillos, deer, anaconda (a constrictor snake that may grow to a length of 25 feet), peccaries (a type of wild pig), and the capybara (the world's largest rodent, about the size of a pig). Butterflies and other insects are abundant, as are fish, such as lungfish, dorado, catfish and piranha.

History and Government

The first known inhabitants of Paraguay were several indigenous groups of Indians, each speaking their own language, including the Guaraní (gwah rah NEE), the Aché-Guayakí (ah CHAY gwah yah KEE), the Toba-Maskoy, the Chaco and the Maca. The largest of these groups was the Guaraní, semi-nomadic farmers. They grew a variety of crops, including manioc, maize, beans, potatoes, bananas and papayas and supplemented their diets with game, fish and wild fruit. They practiced slash-and-burn agriculture, clearing patches of forest, cultivating the land until the soil was exhausted and then moving on to a new location. The Guaraní lived in villages, where they shared several large houses arranged around a central plaza. Inside, the thatched houses were divided to accomodate individual families. As many as sixty families might occupy the same building. A council of chiefs governed the village, with the shaman or priest exerting a powerful

influence. The Guaraní ranged widely throughout what is now eastern Paraguay and western Brazil. They extended west into the Chaco, and some traveled as far as the foothills of the Andes into the territory of the Incas.

Gold and silver ornaments, brought back to Paraguay from these Incan excursions by the Guaraní, attracted the attention of early Spanish explorers in the area and convinced them to search further for the source of such wealth. In the early 16th century a series of Spanish expeditions entered the interior of the continent, navigating the Paraná, the Uruguay and the Paraguay Rivers. The Guaraní, for the most part, welcomed the foreigners. In 1537 Juan de Salazar founded a settlement on a bluff overlooking the Río Paraguay. Named Nuestra Señora de la Asuncion, it was intended to serve as a base of operations for future explorations. The small fort that was built on the site grew to be the headquarters of all the Spanish settlements in southern South America, and eventually became the capital city of the independent nation of Paraguay.

Within about 20 years most Spaniards had given up the search for precious metals and had begun to settle on land well-suited to raising cattle and farming. Although slavery as such was outlawed by the Spanish crown, the colonists introduced a system using the local indigenous people as forced labor, "in return" for teaching them to lead a Christian life. Guaraní revolts were unsuccessful. In the late 16th century Jesuit missionaries arrived in Asunción. They established a series of missions. By the beginning of the 17th century, more than 150,000 Guaraní lived in the missions, which provided protection from the forced labor of the settlers and from the raids of Brazilian slave traders. The missions were well-organized agricultural and cattle-ranching communities, where work and responsibility were shared. The Jesuits made an effort to retain the some of the traditional leadership of the chiefs. The communities became commercially successful operations, exporting cotton, tobacco, hardwood, cattle hides, and yerba maté, a native herbal tea.

The missions also offered numerous educational opportunites, including academic, practical and artistic study. The well-stocked libraries and up-to-date workshops gave the Guaraní access to hundreds of books, works of art, equipment and tools, which they used with great skill. Eventually, the wealth and power of the missions drew hostility, and the Spanish government expelled the Jesuits from South America in 1767. The missions were raided and burned, and the Guaraní inhabitants were either forced into slavery or escaped into the forests. Today, some Guaraní credit the Jesuit missions with helping to save their language and culture.

In 1811 Paraguay followed the example of other colonies in South America, tired of trade restrictions and angry over tax burdens, and declared independence from Spain. Of immediate concern was the threat of being absorbed by one of its larger neighbors, Argentina or Brazil. Skillful negotiation by a lawyer, Dr. Jose Gaspar Rodriguez de Francia, allowed Paraguay to retain its autonomy. Eventually Francia was named "dictator for life." He enforced an isolationist policy, closing the country's borders, and demanded that Paraguay become agriculturally self-sufficient.

Following Francia's death in 1844, a congress was convened to ratify a constitution and elect a president. Carlos Antonio López, "the father of Paraguay," was chosen. He opened the country's borders to trade and encouraged foreign experts to live and work in Paraguay. Schools, medical clinics and roads were constructed, and the first railway in all of South America was built. Lopez's son, Francisco Solano López, was groomed to succeed his father, and came to power when the elder Lopez died in 1862. Within a few short years, Paraguay was engaged in the War of the Triple Alliance, a devastating conflict with Brazil, Argentina and Uruguay. Outnumbered and outgunned, Paraguayans managed to hold out for four incredibly difficult years until 1869, when López was killed by the Brazilian army. Over half the population had died, including 90% of the adult males. The land was devastated; the people were starving; the country faced enormous debt. As a result, the government sold a great deal of public land to foreigners to raise money.

Recovery was slow, and in 1932 Paraguay found itself at war again, this time with Bolivia over possession of the Chaco region. Heavy casualties from fighting and disease left the country in crisis once more. In

the aftermath of its second devastating war within a century, Paraguay was ruled by a series of dictators and endured periods of political instability. In 1954, General Alfredo Stroessner came to power and ruled until a coup in 1989. During this time, Paraguay began to develop its enormous potential for hydroelectric power, with the construction of the Itaipú Dam, built in cooperation with Brazil.

Declaring his intention to restore constitutional democracy to Paraguay, General Andrés Rodríguez, leader of the coup against Stroessner, called for freedom of the press and economic reform. Today, a democratic government is led by President Juan Carlos Wasmosy, elected in 1993. A Congress, made up of a Senate and a Chamber of Deputies, holds legislative power, and the judicial branch includes a Supreme Court of five members.

The new government faces problems of land reform, deforestation, and the need for economic development. A trade alliance with Argentina, Brazil and Uruguay, called Mercosur, offers the hope of a revitalized economy. Joint hydroelectric projects with Brazil and Argentina will make Paraguay the largest exporter of electric power in the world as it enters the 21st century.

Language

Paraguayans take great pride in their mixed Spanish and Guaraní culture, and mestizos (people of mixed Spanish and Indian descent) make up the greatest part of the 4.5 million people who live there. Much of the population, in fact, is bilingual. Spanish is the official language, the language of business and government; Guaraní is the more intimate language of home and play. Both are national languages. One poet declares that Paraguayans "love, hate and fight in Guaraní." As in other areas of the Americas, the remaining indigenous peoples of Paraguay are relatively small in number (estimated at around 44,000), and many struggle to find ways to maintain their traditional culture while surviving in a cash economy.

Immigration

In the first half of the 20th century a number of immigrants from Germany, Russia, Eastern Europe and Canada settled successfully in Paraguay. The best-known of these are the Mennonites, a German-speaking religious sect, who came from Russia and Canada in search of religious freedom. They built productive agricultural communities in the challenging Chaco area, and they now number over 12,000. More recently, colonists from Japan, Korea and China have come to Paraguay, attracted by agricultural opportunities. A growing number of Brazilians (whose language is Portuguese) have moved into eastern Paraguay, particularly into the area of the Itaipú Dam. The annual growth rate of the population in Paraguay, at 2.7% in 1994, is one of the highest in South America.

Urban Life

The rhythms of daily life for Paraguayans depend, to a large extent, on where they live and on what they do for a living. In the large urban centers of Asunción (ah sun see OWN), Encarnación (en car nah see OWN) and Ciudad del Este (see YOU dod del est), the types of jobs, housing and lifestyles are as varied as might be found in other cities of comparable size. Shopkeepers, bankers, office workers, sidewalk vendors and construction workers might mingle in the open markets with those who drive busses, pilot river boats or work in restaurants. Just as in most cities, homes range from palatial mansions to attractive houses and apartments through adequate shelter to substandard dwellings. Still, even in the bustling capital of Asunción the Latin tradition of closing down the shops and offices at noon and re-opening later in the day is honored.

Rural Life

Slightly more than half of Paraguay's people live in rural areas, with most in the lush and fertile lands of eastern Paraguay. Swiss naturalist Moisés S. Bertoni wrote that the lands here "reach a point of fertility

that surely very few lands on earth can match, or perhaps they are even superior to all the others." Many rural residents are subsistence farmers. As in other parts of the world, this is usually a family enterprise with each member's work a necessary contribution to assure a livelihood. As one woman remarked, "...we all work together. Each one does their part. Each one does the best they can, what they're able to do." Hard work is the hallmark of rural families, including the children. In addition to work, a sense of community and time for family and fun are valued.

Rural houses often are small, are built of adobe, brick, wood or concrete blocks and are roofed with thatch, tile or corrugated iron. In towns and villages, dwellings may be more substantial, and are sometimes built right next to one another, sharing a common wall in the Spanish fashion. In other neighborhoods, individual houses may stand alone on small lots as they do in suburbs of the U.S.

Agriculture and the Economy

Paraguay's fertile land is a valuable natural resource, and most of the population earn their livings through agriculture. In addition to being a nation that is self-sufficient in providing food for its people, 90% of Paraguay's exports are agricultural products, including cotton, beef, yerba maté, tobacco and coffee.

The majority of farming families, however, do not own their own land. "Paraguay is a nation of men without land and land without men." This popular saying refers to a situation in which a very few people or corporations own a large percentage of the arable land. Small farmers cannot afford mechanized equipment and therefore rely on oxen to plow, to power sugar cane presses and to provide transport. This makes it impossible for them to compete with the bigger mechanized farms of the large landowners.

Land allocation and finding ways to make small-scale farming economical are major issues facing the new democratic government. Some attempts at solving these problems include a rural land-owning initiative, which allows families to buy land over many years, and the establishment of cooperatives which enable farmers to share the expense and benefits of more modern farm machinery.

Education

Education is compulsory in Paraguay, beginning at age 7. Most of the schools are run either by the state or by the Catholic Church, but some are private or are run by other religious denominations. Officially, every child is to attend primary school for six years, but rates of attendance and standards of education vary from region to region, with the largest differences appearing between the rural and the urban schools. Problems of transportation in rural areas, as well as the need for children to help with farm work, lead to poorer attendance outside the urban centers. In cities and towns, more schools are available, transportation is easier, and family needs are different.

The school session lasts 4 hours, with some grade levels attending in the morning and the rest in the afternoon during the March - December school year. Overall, approximately 93% of children in the whole of Paraguay attend school regularly.

Classes are taught in both Spanish and Guaraní, and nearly half of the population is bilingual. Other subjects include reading, grammar, mathematics, health, science, physical education and sometimes art or music.

Secondary school lasts for another six years, but few children remain in school until they are eighteen. Only about 24% of eligible students attend secondary school. There are two universities in Paraguay, the government-run National University in Ascunción, and the private Catholic University. Attendance at the National University is free. Many children of wealthy families go outside the country to attend college. Paraguay also has a number of teacher-training schools and schools of agricultural and veterinary science, as well as several science institutes. The adult literacy rate is 90%, and the government is working to encourage adult evening classes for those who are not able to read. Since girls are more often kept home from school to help, the illiteracy rate is slightly higher among females than males.

Food

No discussion of Paraguayan daily life can ignore yerba maté (mah TAY), the national drink. This refreshing tea has been part of life in the area since long before the Spanish arrived. It is drunk hot during cool weather, and it is mixed with other herbs and served cold in summer months. Traditionally, it is drunk from a maté, a cup made from a gourd or cow horn, and sipped through a metal or wooden straw, called a bombilla (bom BEE yah), which has a filter on the end. A single maté and bombilla are passed around and shared. (It is considered very rude to refuse a drink when it is offered in this fashion.)

A cornbread made of ground maize and cheese, called sopa paraguaya, is the national dish. Soups of meat, vegetables and cheese are also popular. Grilled meats, including those cooked at large-scale barbecues known as asadas (ah SAH dahs), are served frequently. Mandioca (mon dee OH kah), a root vegetable somewhat like a potato, is a staple. Local fish and tropical fruits, vegetables, and a variety of breads round out the Paraguayan menu. And yes, fast food restaurants from the U.S. have made their appearance in Asunción!

Religion

Because the majority of Paraguayans are Catholic, important religious celebrations such as Christmas and Easter are national holidays. In addition, local patron saints are honored by annual festivities in towns and villages, usually including a procession with a statue of the saint carried through the town. European and Asian immigrants have brought with them other religious traditions, and a number of Protestant Christians have strong organizations in the country. Still, the Catholic Church predominates (by law, the president must be Catholic). Though the relationship between the church and the government has sometimes been difficult, religious leaders and the Christian faith have been consistently important in the daily life of many Paraguayans.

Art

The country's artists and writers often take their themes from events of local history or from the nation's important social issues, as well as from daily life and the local landscape.

After the arrival of Spanish missionaries, the native Guaraní quickly learned to carve and paint using European tools and techniques, and to play musical instruments brought from Europe. The ruins and preserved artifacts of the missions preserve a unique artistic style, called by some "Guaraní Baroque." Elaborate decorative stonework and woodcarvings reflect the elaborate style of European Baroque, popular during that time period, but with a distinctly Paraguayan twist. The plants, flowers, trees, vines and fruits of their surroundings were clear inspiration for the Guaraní artists, who left behind beautiful monuments to their skills and to their deep connection with their environment.

This era left a musical legacy as well; the harp and the guitar are Paraguay's most popular instruments, and the craft of making them with fine native woods is one that is passed from one generation to the next. Later immigrants brought the polka, which was adapted and incorporated into the country's popular culture. The most famous folk dance of Paraguay is the bottle dance, in which a female dancer enacts a rigorously active performance while balancing one or more water-filled bottles on her head! Of course, in our age of global communication, people in Paraguay can also be found enjoying rock 'n roll, classical music or any number of other musical forms.

Perhaps the best known and most recognizable of Paraguay's folk arts is a unique type of lace known as ñanduti, or spider-web lace. The traditional patterns use motifs that represent local flora and fauna and reflect the original designers' intent observation of their natural world. A large piece, such as might be used for a wedding veil, may take up to a year to make. A hand-embroidered, homespun cotton cloth is another traditional craft.

Current good relations with its neighbors and the planned economic alliance in the area provide Paraguay with assured access to the sea and thus to the global economy. So it is that Paraguay's geography, through its rich, fertile soil and mighty rivers, continues to shape its people's lives and point to possibilities for a bright future.

Sources: Interviews with current and former Peace Corps Volunteers and with others who have lived in Paraguay. Also: Victoria Veron, *Paraguay: Informaciones Generales Y Turisticas* (n.p.: Veron, 1989); Dennis M. Hanratty and Sandra W. Meditz, *Paraguay: a Country Study* (Washington, D.C.: U.S. Government, 1990); Marion Morrison, *Paraguay* (Chicago: Children's Press, 1993); *Dorling Kindersley World Reference Atlas* (New York: Dorling Kindersley, 1994); *1995 Information Please Almanac* (New York: Houghton Mifflin Company, 1995); Sandra Dibble, "Paraguay: Plotting a New Course, *National Geographic* (August, 1992); James Brooke, "A Few Potholes on the Way to Democracy," *New York Times* (January 7, 1995); "Trends in Developing Economies, 1991" (Washington, D.C.: The World Bank, 1991); Clement McNaspy, S.J., *Lost Cities of Paraguay* (Chicago: Loyola University Press, 1982); *Itaipú Hydroelectric Development* (n.p.: Itaipú Binacional, 1992); Henry Goethals, "Preserving a Paraguayan Paradise," *Américas* (42, no. 5, 1990); Paul G. DuMont, "Teaching Conservation in Paraguay," *Soil and Water Conservation News* (January-February, 1992); Larry Luxner, "Watt a Dam!," *Américas* (43, no. 2, 1991); John Hoyt Williams, "Paraguay's Unchanging Chaco," *Américas* (34, no. 3, 1982); Werner Baer and Luis Breuer, "From Inward to Outward Oriented Growth: Paraguay in the 1980's," *Journal of Interamerican Studies and World Affairs* (28, Fall 1986).

Activities: Grades 3-5

Packing for Paraguay

Focus:
Using maps and other geographic representations to acquire, process and report information about Paraguay. (Standards 1, 3)

Resources:
Available classroom and school library materials (globes, maps, encyclopedias, etc.); information on Peace Corps, p. 1 , access to computer and Internet (optional).

Background:
Paraguay has a semi-tropical climate similar to that of south Florida. Because it is located south of the equator, the seasons occur in months opposite of those in the U.S.: Summer—December, January, February; Fall—March, April, May; Winter—June, July, August; Spring—September, October, November. The average summer temperature in Asunción (ah sun see OWN), the capital, is 85 degrees F (28.8 C); during winter, the average temperature is 65 degrees F (18.3 C). In an average year, some rain falls in every month.

Activities:
1. Ask students to imagine they are Peace Corps Volunteers who have just learned that they will be assigned to Paraguay. What questions come to their minds? Since they will be spending two years of their lives living and working with the people of that country, they naturally will want to learn as much as possible about what life there is like. (Then share information on the Peace Corps.)

2. Generate a list of questions (record on chart paper or transparency, to be saved for later use) that students think a Peace Corps Volunteer would most want to know about the place where he/she will be going. Highlight questions that relate to the six essential elements of geography: the world in spatial terms, places and regions (e.g., Where is Paraguay? What is the climate like?); physical systems, human systems (What does the country look like—beaches, mountains, hills, desert? What are the cities like?); environment and society, the uses of geography (What clothes will you need? What language will you learn? What do people do there?) (See p. 2 for Geography Standards.)

Note: with older students, have them come up with the general categories themselves, and then develop the questions.

3. Divide the class into work groups of 3 or 4. Brainstorm about where they could find information on Paraguay. Assign each group particular classroom resources (maps, globes, atlases, encyclopedias, almanacs, etc.) to explore for answers to the questions generated in step #2. (If available, use search tool Lycos on the Internet. Lycos gives excerpts of available articles.)

4. Return to the students' questions on the board. How many can now be answered satisfactorily? How many cannot be answered yet? Record all unanswered questions and alert students to look for those answers during the remainder of this unit.

5. Review the background information and any other information that has been located regarding climate in Paraguay.

6. Peace Corps Volunteers are limited to two pieces of luggage to be checked, and these cannot weigh more than 80 pounds. A carry-on bag cannot weigh more than 11 pounds. Have students begin a list of what a Peace Corps Volunteer would pack for his or her two-year stay in Paraguay, based on what they have learned. Assume they will be leaving in two days' time.

7. Have students weigh some items and revise their packing lists. (Since adult clothing is heavier than children's, use adult items where possible.)

8. Using their revised lists and plans for what to take, have students write about the hardest and easiest choices they made. Use a Think-Pair-Share technique to generate questions for your Peace Corps Volunteer about how he or she made choices about what to take. (Pause for <u>every</u> student to think about his/her answer and write it down. Pair students to discuss and compare their thinking, and to build on one another's ideas. Have each pair share their expanded ideas with the group. See Extension #1 for possible questions.)

Further Activity:
Have students look over and discuss the descriptions of the types of jobs Peace Corps Volunteers do in Paraguay on p. 52. Then have each choose the job type he/she would be most interested in. Write or discuss reasons for the choices.

Extensions:
1. Locate your Peace Corps Volunteer's country on a map. Based on its location, predict its climate. Find out from your Volunteer how accurate you are.

2. Write to your Peace Corps Volunteer and ask what it was like for him or her when (s)he first learned where (s)he'd be assigned. What questions first came to mind? Was it hard to decide what to take? Did (s)he make good decisions? Ask these and other questions you have generated. Compare these to the questions by students in step #2 of this activity.

3. What is your Peace Corps Volunteer's work? What preparation did he/she have to do that job?

4. Compare the seasons and climate of your Volunteer's country with that of Paraguay.

Where in the World Are We Going and How in the World Will We Get There?

Focus:
Locating Paraguay in relationship to the rest of South America and to the location where students live. (Standards 1, 2, 3)

Resources:
Map or globe of the world; map of South America, p. 43; blank map of South America, p. 44; Where In the World Are We Going worksheet, p. 51.

Background:
Paraguay is located in South America in a region known as the Southern Cone. (South America's shape resembles a giant ice cream cone, with Paraguay located at the top part of the cone.) Travel to Paraguay from the United States is easiest by air, landing at the airport in the capital city of Asunción.

Activities:
1. Give students blank maps of South America and ask them to fill in the names of the countries, referring to available maps. Locate and mark Asunción, the captial city of Paraguay. Locate and mark the Atlantic Ocean, the Pacific Ocean and the Caribbean Sea. Color the map.

2. Have students work with a partner to answer questions on the worksheet, p. 51.

3. If possible, contact a local travel agent to find out the itinerary a traveller would follow from your location to Asunción. Where is the airport nearest to your location? Would there be stops in other cities? Locate those cities.

4. Determine Paraguay's longitude and latitude. What other countries share the same longitude and latitude in the southern hemisphere? In the northern hemisphere? Can students make any inferences about Paraguay from this?

5. Discuss: Why would people want to travel to Paraguay? To any other country?

6. Have students try a "mental map" of Paraguay and its neighbors. Using different sizes of circles (or other simple shapes) to represent each country, draw and label them in relationship to one another. Compare these maps with an actual map.

Further Activities:
1. Try "mental maps" of your state and neighboring states, and/or of your Peace Corps Volunteer's country and its neighbors.

2. Have students revise their "mental maps" of South America regularly, adding further information to them as they continue their study of Paraguay. Repeat the mental map activity at the end of your study, and have students include as much information about land forms as they have learned during their investigation. Compare these later efforts with the earlier ones, and with actual maps.

Extension:
Look at a world map and try to determine which countries your Peace Corps Volunteer flew over en route to his/her destination. Write and ask if (s)he stopped in any other locations on the way. What did she/he find? Find the location of each on a map. What countries share borders with your Volunteer's country?

"Now Boarding for Departure..."

Focus:
Exploring the people and culture of Paraguay. (Standards 4, 10)

Resource:
The video, *Destination: Paraguay.* (Note: check pre- and post-viewing suggestions on the video jacket for additional ideas.)

Activities:
1. On the day of their "departure" for Paraguay, arrange chairs in the classroom like seats in an airplane. Issue boarding passes with row and seat numbers, and have students "board" in groups according to rows, as is done on most commercial flights.

2. As flight attendant, announce that there will be an in-flight movie about the people and their lives in Paraguay. "Passengers" are to pretend that they will get to meet all the people they see on the video when they arrive at their destination.

3. Review unanswered questions from the first day's list, and remind students to watch and listen for answers. (If a large number of questions remain, they can be categorized, and small groups of students can be asked to be responsible for information relating to certain questions. For example, one group might pay special attention to any information relating to climate, another to information about schools, etc.)

4. Show the video.

5. After viewing the video, give students an opportunity to talk and ask questions about what they have seen. Review information students gleaned that relate to their earlier questions. Where could they go for other answers?

6. Have each student write a letter to his/her family, giving their first impressions of the country. What is different from what they expected? In what ways? What is similar to what they expected? In what ways? Did they pack some things they won't be needing? Do they need anything they didn't bring? What clues told them they would (or would not) need those items?

Note: Save all student letters, etc. to be used to complete a "Memory Folder" of their "trip."

Extension:
Ask your PCV what his/her memories are of first arriving in the Volunteer country. What were his/her expectations? Where did he/she get those expectations? Have any of his/her ideas about the country changed since that first day?

Getting There is Half the Fun

Focus:
Investigating urban/rural contrasts and local methods of transportation in Paraguay. (Standards 4, 5, 9)

Resources:
Transportation in Paraguay map, p. 45; site assignment list (below); Site Location Key, p. 46.

Background:
Some Paraguayans are dependent on their river systems for transportation, although the road system has grown rapidly in the last ten years. Passenger boats are used frequently along the Río Paraná and the Río Paraguay.

Trucks, buses, motorcycles and automobiles are in use in the cities, towns and countryside, and are used to travel the major highways. However, many of the roads are not paved. Since heavy rainfall turns these roads to mud, gates on the highways are closed during bad weather to prevent passing vehicles from churning the roadway into impassable ruts. Travellers must always check the weather before starting a road trip, to avoid being stranded in an isolated area.

There is rail transportation in Paraguay, although not much, and several airports are in use. The only all-weather airports are in Asunción, Ciudad del Este (see YOU dod del est) and Mariscal (mah REES kahl) Estigarribia (es ti gar ree BEE ah).

Many people in rural areas rely on horses or ox-drawn carts for personal transportation, and of course, like most people in the world, they walk much longer distances than many people in the U.S. are accustomed to.

Activities:
1. Make "site assignments" to your student-Peace Corps Volunteers (the location where they will be living and working) from the list below. You may want to assign them in teams. Give students their assignment slips and copies of the transportation map.

Sites and approximate locations (key on p. 46):

a. Iturbe: 35 mi. S. of Villarrica; 10 mi. W. of railway
b. Concepción: 100 mi. NE of Villa Hayes; just E. of the Rio Paraguay
c. Loreto: 175 km. SE of Puerto Casado; 25 km. E of Rio Paraguay
d. Caaguazú: 125 km. E. of Asunción; just S. of the Pan-American Highway
e. San Pedro: 12 km. E. of the Rio Paraguay; 125 mi. NE of Villa Hayes
f. San Juan Nepomuceno: 130 km. SW of Ciudad del Este; 75 km. SE of Villarrica
g. Trinidad: 13 km. E. of Corpus hydroelectric project

2. Discuss the map legend and its meanings, and share the background information. Why do students think most towns and cities are located east of the Rio Paraguay? Why is there only one paved road through the Chaco?

3. Students should mark the maps with their assigned destinations. Review methods of transportation by scanning through the video again and/or referring to information from the first day's research.

4. Each student or team is to plan an itinerary from Asunción to their assigned place, listing which methods of transportation they will use to get there. (Boat, bus, train, plane, etc.) They will refer to the transportation maps to find the most likely routes to their locations.

5. Discuss similarities and differences in common methods of transportation between your area of the United States and Paraguay. Make a Venn diagram to compare the two.

Further Activities:

1. Organize a miniature parade by having students work in pairs to make a series of "Transportation Floats" representing common modes of transportation in Paraguay, in your area of the United States, and in your Peace Corps Volunteer's country. Cover and decorate shoe boxes for the floats, and then make boats, cars, ox-carts, etc. from recycled materials.

Discuss the practicality of various methods of transportation. For example, cars are less useful in areas where there are not many roads; the large wheels on Paraguayan ox carts are helpful when the road is muddy.

Label each float and display. On the labels, complete the following statements: This method of transportation is practical in (name of country or region) because_____. It would not be practical in (name another country or region) because_____.

2. Rate the methods of transportation according to energy efficiency. Discuss methods of transportation for the future.

Extension:

Ask your Peace Corps Volunteer what methods of transportation are used in the area where (s)he is living. In what ways are these methods practical for that area? Is it the same throughout the country? Why or why not?

Sights Along the Way: A Field Guide to Wildlife of Paraguay

Focus:
Exploring ecosystems of Paraguay. (Standard 8)

Resources:
Classroom/school library resources such as books, encyclopedias, etc., sample field guide page, p. 53.

Background:
Paraguay has two distinct geographical regions. Eastern Paraguay is forested land with rich soil; western Paraguay, called the Chaco, can be either dry or swampy, depending on rainfall amounts. The trees and plants that grow there are different from those in eastern Paraguay. Each region supports its own kinds of wildlife, although some species have adapted themselves to live in both. Although some species found in the Southern Cone of South America, such as deer, mice, armadillo and fox, are also common in the U.S., others are less familiar (for example, jaguar, anteater, caiman, rhea, anaconda, vampire bat, tapir, agouti, peccary, piranha, lungfish, dorado, blue Morpho butterfly, capybara, fer-de-lance, capuchin monkey, howler monkey, paca, toucan, parakeet). Any or all of these could be included in your field guide.

Activities:
1. Show students the sample field guide page, and complete one page together so they will know what to do. In researching how each species meets its basic needs (food, water, shelter and space), students will be able to describe the ecosystem necessary to the animal's survival.

2. Divide the class into cooperative groups and give each team one or more animals to research. Brainstorm important questions to be answered about each animal. Teams will research their animals and write and illustrate a page dedicated to that animal.

3. Organize the pages into 3 sections: animals of the forested region; animals of the Chaco; animals which live in both locations. Write introductions to each, describing the ecosystems.

4. Finish the book with a cover, title page, etc. Number the pages, and bind or staple.

5. Write: Choose an animal from Paraguay that you think might be able to adapt to living in your area. Choose one that could not. Explain the reasons for your choices.

Further Activites:
1. Research plant life in the two major regions of Paraguay and make a similar field guide.

2. South Florida and eastern Paraguay have similar climates. Do they have similar ecosystems? Research to find out. What areas of the world have ecosystems similar to those of Paraguay?

3. What are your state's geographical regions? Are different species of wildlife found in different parts of your state? How do the ways that each type of animal meets its basic needs for food, water, shelter and space match up with the geographic region in which they live? Research, write and illustrate a field guide to wildlife of your area.

Extension:
Ask your Peace Corps Volunteer for a list of wildlife found in his/her country. Are some animals on the list also found in the U.S.? In Paraguay? Make a Venn diagram to illustrate the species which are common to the U.S., to Paraguay, and to your Volunteer's country. Which are distinct to each? Why do you think those animals are found only in that location?

A Day in the Life...

Focus:
Comparing a school day in rural Paraguay, in urban Paraguay, and in your school in the U.S. (Standards 4, 12)

Resources:
Video, *Destination: Paraguay*; personal experiences; Peace Corps Volunteers on Life in Paraguay, pp. 54-56; School Comparison Chart, p. 65, self-adhesive notes (optional).

Background:
The children in the cities and larger towns of Paraguay have easier access to schools than children in the countryside. Officially, six years of schooling are compulsory; a child's school day lasts four hours. Children start at about age 7 and continue through the six years of elementary school. Afterwards, some children continue on with six more years of secondary school. Often, however, distance and the demands of an agricultural life make it extremely difficult for children in the rural areas to attend. The urban areas offer more schools, and transportation is easier. Schools run double shifts, with some grade levels attending from 7 a.m. to 11 a.m., and the rest from 1 p.m. to around 5 p.m.

Activities:
1. On large sheets of paper, copy the headings and the grid from the School Comparison Chart, p. 65. Hang these where they can be seen by students. Students will fill in the chart, using large (3 x 5) self-adhesive notes, or index cards and tape.

2. Through discussion, students as a class agree on appropriate responses to reflect their typical school day. Recorders are asked to summarize those responses on the cards or self-adhesive notes, and place them in the appropriate space on the chart.

3. Students read the Peace Corps Volunteers' comments about Life in Paraguay (pp. 54-56) to gain further information for the chart, which is added after discussion. It is important during the discussion to help students look for and understand the reasons for the differences they note. Otherwise the idea that "different means bad or weird" will be reinforced.

4. Noting particularly areas of the chart which remain blank, students re-view the video for information about schools in Paraguay. This information is added to the chart.

5. After charts are completed, students produce Venn diagrams comparing schools in urban and rural Paraguay. Then they expand the diagram to include their own school.

6. Working from the master chart, have students highlight all the information in the column that deals with information about their own school and experiences. Using the same color, students are to mark the information in other areas of the chart that correspond most closely to their own experiences. (For example, if students listed Language Arts, Math, Social Studies and Science as their subjects, they will mark those in all other columns where they are found.)

7. After the similarities have been highlighted, ask students to look for patterns. Are there more similarities or differences between, for example, the student's own school experiences and those in urban Paraguay? Which school experiences are most similar to students' own? Most different? What might be reasons for this? Discuss.

Further Activities

1. Make contact with a school in a setting different from your own (i.e., if your school is in an urban center, write to a school in a rural area, or vice-versa). If you and your class can't come up with a personal contact, call your state department of education for the name of a teacher at a comparable grade level, and write his/her class for help. Send a list of questions about your correspondent's school, and ask for help in your comparison study.

2. Extend your comparison chart by taping more paper to the right side and adding another column headed appropriately (e.g., Rural U.S. or Urban U.S.). Fill in information received, and use highlighter to emphasize similarities with students' own experiences, as in #6 and #7 above.

3. Join an e-mail classroom exchange project such as those listed by the Global School Net Foundation at URL: **http://www.gsn.org**

Extension:

Send your Peace Corps Volunteer a list of questions about schools in rural and urban areas of his/her country. Extend your chart to include that information, and mark the similarities to students' own school experiences.

Aleluya!

Focus:
Understanding environmental challenges in today's Paraguay. (Standards 13, 14)

Resources:
Aleluya!, written and illustrated by children of Villa Salvador, Paraguay, pp. 57-58

Background:
Like every other nation in today's world, Paraguay faces challenges regarding the care and use of its environment. People there must deal with the dilemma of deforestation. More than 12 million acres of Paraguay's forests have been cleared, and some people estimate that within only a few years the country will lose all of its forests.

This creates a number of problems, including changes in the watershed (the area that drains into a river, stream or other body of water). A forest acts as a natural filter for rainwater because the rainfall drips through the vegetation instead of falling directly on the soil. When a forest is cut, rainwater hits the land directly and runs off more quickly. This causes soil erosion. When the rainwater reaches streams and rivers it is less clean because of the soil and debris it's picked up along the way. Drinking water becomes clouded with silt and contaminated with parasites from the waste of humans and animals that live or work in the area. The land has less ability to store water, and rivers become thick with mud. This causes worse flooding, and floods occur more frequently. There is a loss of scenic beauty and wildlife. Medicinal plants are lost. The productivity of the land is reduced, and crop yields are less. This means fewer jobs and less income.

Yet, people need to be able to clear land to raise enough food to feed their families and to earn an income. In order to raise enough crops to sell or to clear land to graze cattle for export, more land must be cleared. This often is done by cutting and burning forest.

In addition, in many areas the only fuel for home heating or cooking is wood. Further, other countries will pay good prices for the beautiful hardwoods found in Paraguay's forests. People want to sell these products to earn enough for a better life.

Activities:
1. Introduce background information to students. What does "deforestation" mean? What problems does it bring? Why are forests being cut and burned in Paraguay?

2. Ask students to put themselves in the place of a Paraguayan farmer who needs to clear land and to tell about his predicament. Then role play an environmentalist, talking to the farmer. What would he/she say?

3. Read *Aleluya!*, pp. 57-58.

4. Discuss: What do the young authors think about the loss of forests in their country? What did they say in the text of the story to make their opinions clear? How else could they have said this?

5. Interview parents, neighbors and other students to identify environmental issues that are important in your area.

6. Do research to learn about areas of the United States where deforestation is an issue. Are the arguments for and against cutting the forests similar to the ones used in Paraguay? In what ways?

7. Work in cooperative groups to brainstorm solutions to this difficult problem. Combine your best ideas and write a letter to your Senator or Congressperson outlining them. What solutions does he/she favor?

8. Create a children's picture book about these issues, and make arrangements to read it to children in the Kindergarten, first and second grades of your school. Give the book to your school library.

Extension:
Share your book with your Peace Corps Volunteer and ask what environmental issues people in his/her country face. Is deforestation a problem there? What kinds of strategies are people there using to try to solve these problems?

Activities: Grades 6-9

Destination: Paraguay

Focus:
Acquiring and analyzing information from maps. (Standards 1, 17)

Resources:
Information on the Peace Corps, p. 1; maps of South America and of Paraguay, pp. 43-50; classroom globe and atlas; video, *Destination: Paraguay.*

Activities:
1. When Peace Corps Volunteers receive their country assignments, they naturally are curious about the country in which they'll live for the next two years. In this activity students will explore some of the ways in which Volunteers might find information. Divide students into cooperative groups of 3 or 4 and ask each group to generate a list of 10 or more questions they would want answered if they had just learned they would be leaving shortly for a two-year stay in Paraguay.

2. Students are to mark any questions they think they could answer by consulting maps. This may lead to discussion of maps designed for various purposes. Ask if any questions (such as the language spoken) might be inferred from information found on a map. Have students in each group predict answers to all the inquiries on the list, whether map-related or not. Collect the lists and the predictions.

3. Give each group a copy of a map of South America or of Paraguay, using those provided in this guide and those available in other classroom resources. (Not all groups will have the same map.) Students are to list all the information they are able to learn about Paraguay from their map. After adequate time for analysis, collect and redistribute the maps. Repeat the process with the second map, and again with a third.

4. Return each group's original list of questions, and have students answer any they can, using information gleaned from the maps.

5. Discuss the questions, answered and unanswered. Were students able to answer all the questions they marked? Any that they didn't mark? Were their predictions consistent with the information they gained from the maps? Were they able to infer answers to any questions from looking at the maps? What did they learn about Paraguay from the maps that they didn't know before? What other sources could they use to get the information they need?

6. Show the video, *Destination: Paraguay.* Students then answer other questions on their lists, as possible. Save lists for future reference and revision as the study of Paraguay progresses.

Further Activities:

1. Access to the Atlantic Ocean has had great significance in the history of Paraguay, and at times passage along the riverways leading to the ocean has been a source of conflict with its neighbors. Have students examine a topographic map of South America in an atlas. Using information from this map, have them develop hypotheses about why access to the Pacific Ocean has not been as important to Paraguay as access to the Atlantic.

Possible answers: the Andes Mountains make passage in that direction much more arduous and lengthy; not as many rivers provide transportation routes; early Spanish settlers were concerned about trade and transport back to Spain, which is across the Atlantic.

2. Save local newspapers over several days, and distribute to students in small groups. Ask them to cut out any maps they find, especially those of South America, if any, along with accompanying articles or captions. They are to develop three geography questions that can be answered by using each map they've found. (For example: What is the purpose of this map? How does the map help the reader to understand the story better? Is this a map that concentrates on physical characteristics [mountains, rivers, etc.] or human characteristics [roads, buildings, etc.])? Have groups trade maps and questions and answer one another's geographic questions.

Extension:

Ask your Peace Corps Volunteer if he/she consulted a map or maps on first learning of his/her country assignment. Was the information gained from maps useful? Were there features of the country that came as a surprise to the Volunteer, even after all his/her research?

Testing the Waters

Focus:
Understanding the complexity of human effects upon the natural environment. (Standards 14, 15)

Resources:
Copies of the Pollution Information Sheet, pp. 59-60; computer with access to Internet (optional).

Background:
As are many less-developed nations, Paraguay is dealing with the challenge of delivering safe drinking water to its growing population. Treatment plants exist to provide clean water in urban centers, such as Asunción (ah sun see OWN), but poor water supplies are a health hazard in many outlying areas. In 1990 less than half of the urban population had access to clean drinking water, and only 8% of the rural population. Many do not have water piped directly to their homes, and people are at risk from various sources of pollution. Safe drinking water, straight from the faucet, is a luxury many in the U.S. have come to take for granted, but Paraguayans work toward it as a goal. (Refer students to scenes from the video of people hauling water.) Close monitoring of water sources for pollution is a public health necessity that Paraguay is beginning to address.

Activities:
1. Present background information to students.

2. Pass out the Pollution Information Sheet. Review each kind of pollution with the students. Discuss which are naturally occuring and which are the result of human action on the environment.

3. Divide students into cooperative groups.

4. Present to students: Paraguay is a largely agricultural nation. Huge tracts of forest are being cleared for agricultural development. The world's largest hydroelectric power plant is located on the Paraná (pah rah NAH) River at Itaipú (ee tie POOH) Dam. The plant is now generating electric power for use within the country and for export. With this in place, Paraguay hopes to begin developing more industry. Some rural areas have problems with untreated sewage. Given these factors, and others students may have learned about in the video, which sources of pollution do they think are likely to be the biggest problems for Paraguayans? Have them defend their answers. Which problems could be dealt with most easily? How?

Possible answers: Sediments—because of deforestation; heated water from hydroelectric plants; cold water released from bottom of dam; fertilizers and pesticides, etc., as large-scale agriculture becomes more common; animal waste, as the population grows and sewage treatment remains inadequate; in the future petroleum, inorganic compounds and chemicals could become bigger problems with the development of industry.

5. Assign each team one or more of types of pollution to research. They are to gather information about laws in your state protecting water quality and about methods used locally to combat water pollution and provide safe drinking water. What is the major water source for your community? Which pollution types pose the greatest challenges for your community? How do these compare with the problems that challenge Paraguayans? What's being done about them? What was the greatest challenge in your area 50 years ago? What will be the greatest challenge in the future?

Further Activities:

1. Have each student research and then list five things he/she can do to reduce the number of pollutants added to the environment. Discuss: What should we do with our lists?

2. Which pollutants do students think are easiest to control? Hardest? Why? Have them list the ten types in order, easiest to control to hardest and defend their choices.

3. Do an Internet search using Web Crawler, Yahoo, Gopher or Lycos on water pollution. What information is available?

Extension:

Write your Volunteer to find out if safe drinking water is easily available in his/her region. What are major sources of pollution there? What's being done about them? How do they compare with the challenges faced by Paraguayans? By people in your area of the U.S.?

Paraguay's Blending of Cultures

Focus:
Exploring the blending of cultures and geographical features reflected in the arts and crafts of a region. (Standards 6, 9)

Background:
Paraguay's population is 90% mestizo, or of mixed Spanish and Guaraní (gwah rah NEE) Indian heritage. Paraguayans are proud of their Guaraní heritage and take pride in their language, traditions, and art, which are a blend of both cultures. One early example of this cultural blend is found in the beautiful sculptures that still exist in the ruins of 17th century missions. Visual arts often reflect the flora, the fauna and the physical characteristics of the land where the artist lives and works. Where two or more cultures come together in a location, each influences the other in techniques, style and subject matter for art. This was true for the early Spanish settlers and the native Guaraní in Paraguay.

In 1609 Jesuit priests from Spain and other parts of Europe began to establish missions in the region of South America that includes Paraguay. They set up workshops and imported the best available tools from Europe. In the missions, native Guaraní Indians learned numerous European trades and crafts, including sculpture and painting. The Baroque style, characterized by luxurious ornamentation which covered every inch of space, was popular in Europe during that period, and missionary artisans taught this style to the Paraguayan natives.

Guaraní artists learned European techniques quickly and fluently, producing carvings in stone, wood and other materials. Surviving examples reflect a definite Guaraní vision melded with the Baroque European style. The Guaraní love of the plants and animals of their forested, subtropical homeland and delight in their natural surroundings shows in the decorative carvings and paintings found in the ruins of the Jesuit missions. Saints and angels have distinctive Guaraní features in these works, and often they are surrounded by an explosion of lush tropical plants and animals that seem to be trying to expand beyond the boundaries of the spaces that enclose them.

Lace-making, as seen in the video, is another traditional art that reflects a Guaraní vision of the landscape. Traditional patterns are based on birds, animals, flowers and plants of the area. A Guaraní tale says that long ago a young woman found the dead body of her beloved wrapped in a delicate spiderweb. She copied the design, and the beautiful spiderweb lace known as ñanduti was created.

Activities:
1. If possible, show and discuss art reproductions that clearly show the land, flora, fauna and/or people of your own geographic area. What visual clues indicate the local landscape, people and culture?

2. Discuss forms from nature that could be used as identifying symbols of your geographic region (mountains, oceans, species of trees, flowers, animals, birds, etc.). Have students create a design incorporating elements that reflect such features of your region.

3. What cultural or ethnic groups originally settled in your area? Why? Research the style and design of their original art, craft and architecture, and look for examples of how the cultures have influenced one another in buildings, paintings or sculpture in your community.

Further Activity:

Research other examples of the blending of one or more cultures. For example, the Spanish method of herding cattle from horseback spread throughout the Americas, but the demands of different climates and terrain resulted in variations from one location to another. Find information on *vaqueros* in Mexico, cowboys in the U.S. and Canada, *gauchos* in Argentina and Paraguay, *huaso* in Chile, *llanero* in Venezuela, and *paniolo* in Hawaii. [A good source: Richard W. Slatta, *Cowboys of the Americas.* New Haven, CT: Yale University Press, 1990.] In what ways do their clothing, equipment, customs and variations in herding practices reflect practical adaptations to the geography of the area where they are used? Which type of cowboy outfit would be most practical in your region? Why?

Extension:

Ask your Peace Corps Volunteer what natural elements (flowers, plants, animals, geographic features) are popular in the art and designs of his/her region. Compare them to design elements from other regions of the world or the U.S., using books from the library on art and design. Are there examples of cultures blending in your Volunteer's area?

Agriculture in Paraguay

Focus:
Understanding the need for balance between economic growth and enviromental preservation. (Standards 13, 16)

Resources:
Agriculture in Paraguay Worksheets 1, 2, 3, 4, pp. 61-64.

Background:
The transformation in Paraguay's agricultural sector over the last 30 years from a subsistence economy to an export economy has impacted small farmers who could not compete with large producers. (The situation is similar to one often found in the U.S. in which small stores struggle when large chain stores are built nearby.) Since Paraguay has a predominantly agricultural economy, a major portion (52%) of the population is affected. Several programs have dealt with some of the major issues facing rural families and communities whose livelihoods traditionally have come from small farms.

Activities:
1. Since one of Paraguay's greatest resources is fertile land, most people rely on farming or on agriculturally related jobs for their incomes. As students saw in the video, even people who live in urban areas may have jobs related to farming. (Laura's father owns a truck and transports cotton and other exportable goods.) Have students think of situations in their own lives in which problems had to be prioritized and a course of action decided. Hand out and discuss Worksheet #1.

2. Students complete the first worksheet and discuss reasons for their choices.

3. Work with the class as a whole to discuss and complete Worksheet #2.

4. Divide the class into cooperative groups to discuss and complete Worksheet #3.

5. As a class, read Worksheet #4 and compare with the choices and actions students made on Worksheets #2 and #3. Discuss reasons for their choices. Emphasize that there is no single correct answer. What lessons can be learned about solving community problems from the people of Paraguay?

Further Activities:
1. Students research rural or urban cooperatives in their regions to learn more about how they work. Make a Venn diagram or other chart to compare them to the rural committees in Paraguay.

2. Students research problems and solutions of land use in their own region or state.

3. Discuss: What difficulties arise when a population is heavily dependent on a single industry? Refer to examples from your own region or state. (Example: issues of job loss due to closure of military bases.)

Extension:
How important is agriculture in the economy of your Volunteer's country? What issues do farmers there face? Are they similar to those detailed in the worksheets on Paraguay? To those in your own region?

School Life in Paraguay

Focus:
Comparing education in rural and urban Paraguay, and among Paraguay, the U.S., and the country where the class' Peace Corps Volunteer is located. (Standards 4, 12)

Resources:
Video, *Destination: Paraguay;* students' personal experiences; Peace Corps Volunteer interviews, pp. 54-56; School Comparison Chart, p. 65.

Background:
The children in the cities and larger towns of Paraguay have easier access to schools than children in the countryside. Officially, six years of schooling are compulsory. Children start at about age 7 and continue through the six years of elementary school. Afterwards, some children continue on with six more years of secondary school. Often, however, distance and the demands of an agricultural life make it extremely difficult for children in the rural areas to attend. The urban areas offer more schools, and transportation is easier. Schools run double shifts, with some grade levels attending from 7 a.m. to 11 a.m., and the rest from 1 p.m. to around 5 p.m, so the school day for a child in a Paraguayan elementary school is four hours long.

Activities:
1. Introduce students to the school day comparison chart. Have them fill in the appropriate column, based on their own personal experiences.

2. Have students read the Peace Corps Volunteers' comments about life in Paraguay (pp. 54-56). Using information they learn, students fill in the sections on the chart relating to Paraguay. As students work, rerun the video, *Destination: Paraguay,* where they also will find information about schools.

3. Once charts are completed, work together to develop a Venn diagram comparing schools in urban and rural Paraguay.

4. Have students highlight all the information in the column that deals with information about their own school and experiences. Using the same color, students are to mark the information in other areas of the chart that correspond most closely to their own experiences. (For example, if students listed Language Arts, Math, Social Studies and Science as their subjects, they will mark those in all other columns where they are found.)

5. After the similarities have been highlighted, ask students to look for patterns. Are there more similarities or differences between, for example, the student's own school experiences and those in urban Paraguay? Which school experiences are most similar to students' own? Most different? What might the reasons be? Refer to the primary city concept, which says that one city in an area, often the largest, has more contact with the outside world, and thus has a wider range of influences. Discuss. Is your school located in a "primary city"? Defend your answer.

Further Activities:
1. Make contact with a school in a setting different from your own (i.e., if your school is in an urban center, write to a school in a rural area, or vice versa). If you and your class can't come up with a personal contact, call your state department of education for the name of a teacher at a comparable grade level, and write his/her class for help. Send a list of questions about your correspondent's school, and ask for help in your comparison study.

2. Have students extend their comparison charts by taping more paper to the right side and adding another column headed appropriately (e.g. Rural U.S. or Urban U.S.). Fill in information received, and use highlighter to emphasize similarities with students' own experiences, as in #4 and #5 above.

3. Go to the Peace Corps Internet site: **http://www.peacecorps.gov**
Llook for further information from another Peace Corps Volunteer from Paraguay.

Extension:
Send your Peace Corps Volunteer a list of questions about schools in rural and urban areas of his/her country. Extend your charts to include that information, and mark the similarities to students' own school experiences. Make a series of charts comparing urban schools in the U.S., Paraguay and the Volunteer's country. Do the same for the rural schools. Discuss.

Source of Power

Focus:
Investigating ways in which human modification of the environment has long-term effects; applying information to understand environmental problems. (Standards 14, 15, 16)

Resources:
Classroom or library research materials, such as encyclopedias, etc.

Background:
Paraguay has few mineral resources, and as yet no deposits of oil have been found. With modern technology, however, the nation is poised to become one of the largest exporters of power in the world. Paraguay's rivers, long important agriculturally and as transportation routes, now are being developed as sources of hydroelectric power (electricity generated by conversion of the energy of running water). The Itaipú Dam, built on the Paraná River between Brazil and Paraguay, has the largest hydroelectric power plant in the world. It contains the largest turbine generators ever made and produces enough power to more than satisfy Paraguay's needs in the foreseeable future. Paraguay sells the excess electricity to Brazil. The dam was built and the power plant is run by both countries. Two other dams on the river between Paraguay and Argentina are under construction, and when those are completed Paraguay will sell power to Argentina as well, under a similar arrangement.

Ironically, 4 out of 10 Paraguayans do not yet have electricity in their homes. The power stations and other infrastructure (electric lines, poles, meters, etc.) necessary to deliver electrical current to these areas are not yet in place. Money from the sale of excess power to other nations will help to overcome that difficulty, and a loan from the Inter-American Development Bank is helping the government bring electricity to rural areas in the eastern part of the country.

Activities:
1. Have students research hydroelectric power, renewable and non-renewable sources of power, and define *infrastructure*.

2. Lead students to brainstorm with about why it is important to conserve electricity. (Two major sources of electric power—coal and hydrocarbons such as oil or natural gas—are non-renewable resources. Discuss.)

3. For homework, have students survey their homes and list all the fixtures, appliances, etc., that use electricity. In the classroom, have students choose 10 items from the list that they would find it hardest to do without. Prioritize the lists, from most important to least important. Discuss. Are there problems with being too dependent on electricity? What are they?

4. If possible, spend a day in class without electricity.

5. Present background information on Paraguay's abundant hydroelectric resources, and discuss the changes Paraguayans can expect as more and more of their homes are electrified.

6. Since Paraguay will be able to generate more than enough electrical power for its needs, is it still important for Paraguayans to be concerned about conservation? Have students use Think-Pair-Share techniques to

answer this question. (Pause for every student to think and write about his/her answer. Pair students to discuss and compare their thinking, and to build on one another's ideas. Have each pair share their expanded ideas with the group.)

7. Have each student write a persuasive essay, stating his/her position on whether or not it will be important for Paraguayans to practice conservation of electricity in the midst of abundance. What are the advantanges or disadvantages of becoming dependent on electricity? What advice would students give others in the U.S. about the use of electricity?

Further Activity:
Find out about the major hydroelectric dams in the U.S. (such as Grand Coulee in Washington State). What are some of the advantages and disadvantages of such dams?

Extension:
Find out from your Volunteer what the major sources of power are in his/her country. Do most of the citizens have electricity? Why or why not? If your Volunteer is living with fewer electrical appliances, etc., how did he/she adjust? Are there any advantages to not having electricity?

Activities: Grades 10-12

Land of the Rivers

Focus:
Using maps to acquire, process, and report information; examing processes and patterns of human settlement; applying geography to interpret the past. NOTE: THIS WILL BE MORE EFFECTIVE AT THE BEGINNING OF YOUR STUDY, BEFORE STUDENTS HAVE SEEN THE VIDEO. (Standards 1, 12, 17)

Resources:
Blank map of South America, p. 44; Rivers of Paraguay map, p. 48; soil, vegetation, rainfall and temperature maps of Paraguay, p. 47; Population Centers in Paraguay map, p. 49.

Background:
When the Spanish first made their incursions into the center of the South American continent, they found a large population of Guaraní (gwah rah NEE) people and smaller numbers of other Indians living in what is now Paraguay. Because of its navigable rivers, fertile land, good hunting and foraging, and because of the friendliness of the Guaraní, the Spaniards saw the area as ideal for establishing a base of operations from which to launch further forays into the interior of the continent. In 1537 Juan de Salazar chose a site for a small fort. The settlement which began at that site grew to a thriving city and is still the major population center of Paraguay.

Activities:
1. Discuss the relationship between basic human needs and establishing a community: Will there be sources of food, water, transportation, shelter, safety? What factors would have influenced these considerations for Juan de Salazar and his expedition (e.g., friendliness of local people, arable land, transportation routes, etc.)?

2. Divide class into work groups. They are to locate what they consider to be the most suitable spot for Juan de Salazar to have established a settlement. Each group will chose a location for the settlement and must be prepared to present an argument about why their site is a good one.

3. Give each group a blank map of South America and have them label Paraguay. Then give each group a copy of the map of Paraguay's rivers. They will mark the site of their final choice on this map.

4. Salazar and his scouts knew certain information before they made a site choice. One group of local people, the Guaraní, were accomplished agriculturalists and hunters and had been friendly and helpful with information about their area and surrounding territories. This information is represented by the specialized maps on p. 47. Give each group a copy of this.

5. Students discuss the information they glean from the maps, choose a site, mark it and list the reasons for their choice.

6. Groups present their choices and their reasons to the class as a whole, who then vote on a final site choice.

7. Compare choices with the population center map of Paraguay. Over 90% of Paraguay's current population of 4.5 million people live east of the Paraguay River. Not only is western Paraguay, known as the Chaco, sparsely populated; parts of it are still barely explored. What reasons can students give for this, based on what they know thus far?

Possible answers: rivers for transportation, water, food; climate, fertility of soil, rainfall—abundant in the east, problematic in the Chaco.

8. Present to students: Juan de Salazar chose a site on the Paraguay River and founded the city of Asuncion (ah sun see OWN), which is now the capital. One quarter of today's Paraguayans live in the capital city and surrounding areas. Reasons for the site choice included: fertile land for farming; good rainfall; plentiful forests to provide wood for building and for fuel; abundant game; navigable rivers for transportation and an outlet to the Atlantic and the route back to Spain; friendliness of local people.

Other reasons, which students would have had no way of knowing, include: the site is on a series of small hills with the river encircling it on three sides, making it easier to defend. From high ground, there is a panoramic view to the south, east and west. From the hills, it is possible to see quite a distance into the Chaco, where more hostile Indians lived. Because of fewer trees there, anyone approaching could be seen from a long way off. In addition, a lagoon, connected by a natural channel to the river, provides very good shelter and anchorage for boats.

9. Debrief: On one copy of the map of Paraguay's rivers, mark ALL the site choices from all the groups. Compare to the Population centers in Paraguay map, p. 49. How closely do students' choices mirror the population development of that country? Were most of their choices in the eastern section? Mark Ascuncion on the map. Was the class' final site choice anywhere close?

Further Activities:

1. Challenge the work groups to draw a "mental map" of South America, without consulting a globe or atlas. (In making a mental map, they needn't worry about the exact shapes of the countries, but can use basic geometric forms such as circles, triangles, etc. Size and location relative to one another are the focus in this activity.) Have them check and correct themselves with available resources, and rate their group's knowledge of the political geography of that continent.

2. Where are the population centers of your state or region? How did those locations come to be chosen as settlement sites? What geographic factors were involved? Why do so many people live there now? Compare the reasons for settlement with those that influenced population distribution in Paraguay. Compare least populated regions of your state to the Chaco. Are there any similarities?

Extension:

Look at maps of your Volunteer's country to determine where the population centers are. What hypotheses can you develop, based on information you learn from the maps, about why most people have located there? Write up your guesses, and ask your Volunteer if they are correct.

Viewing the Video

Focus:
Comparing urban and rural life in Paraguay. (Standards 4, 9, 15)

Resources:
Video, *Destination: Paraguay;* Information Retrieval sheet, p. 66.

Activities:
1. Pass out copies of the Information Retrieval sheet and review with students. They will be filling in the grid as they watch the video.

2. Discuss comparisons and contrasts between urban and rural life in Paraguay.

3. Have students write essays, stating a position and defending it, on the topic: A rural teen in Paraguay, moving to Asunción, would have (more/less) difficulty than a rural teen in (your state) moving to (large city in your area).

Further Activity:
Discuss the concept of a "primary city": a major city more in touch with the rest of the world than with the rest of its own country. Which city in the U.S. fits that definition? Why?

Extension:
Is your Volunteer in a rural or urban area? Are there big differences in lifestyle for those in the cities versus those in the countryside in your Volunteer's region? What are the differences? Why do they exist?

Nueva Minneapolis?

Focus:
Understanding networks of economic interdependence between Paraguay and its neighbors; learning about ways human actions modify the physical environment and how the physical environment can affect human systems. (Standards 11, 14, 15)

Resources:
Reprints of the article, "Nueva Minneapolis del Sur," p. 67.

Background:
Small landlocked Paraguay has had a history of fighting for its lands and independence from larger and more powerful neighbors. The rivers that form four-fifths of Paraguay's borders served as lifelines, vital to its economic health because of access to the Atlantic, and thus to foreign trade. Control of river ports and transportation routes figured in a number of Paraguay's disputes with neighboring Bolivia, Argentina, Brazil and even Uruguay. Today the region's leaders appear to be seeking strength in cooperation, with joint hydroelectric projects, a regional common market and a proposed new waterway.

Activities:
1. Review with students the role that rivers played in their choices of a settlement site in the first activity, and present background information. Have students read the article, "Nueva Minneapolis del Sur."

2. What is the tone of the article? Point of view of the author? Give evidence and identifying clues (specific words and phrases) from the text.

3. Discuss: What are the advantages to the participating countries if Hydrovia becomes a reality? What are possible disadvantages? What obstacles must be overcome to make it happen? Why do students think that air transport has not taken over for commercial river transport?

4. The author suggests that cities in the area may someday rival Minneapolis or Kansas City. Why choose those cities as points of comparison, instead of Boston, San Francisco or others?

Possible answer: Minneapolis and Kansas City are in the middle of the continent, as are the South American cities in question.

5. Have students do research on large waterway projects in North America, such as the St. Lawrence Seaway or the Arkansas River Navigation Route. What results did people in the area anticipate from these projects? Were their expectations met? What advantages and disadvantages were there? What problems are involved when more than one country, state or city has jurisdiction?

Extension:
Are rivers an important transportation route in your Volunteer's country? Is the country landlocked? Ask your Volunteer what role rivers play, if any, in people's everyday lives in his/her area.

Deforestation in Paraguay

Focus:
Exploring deforestation and its long-term human and environmental effects. (Standards 14, 15, 16, 18)

Resources:
Copies of Deforestation Decision Tree, p. 68; "Preserving a Paraguayan Paradise," p. 69.

Background:
Like every other nation in today's world, Paraguay faces challenges regarding the care and use of its environment. One dilemma that people must deal with there is deforestation. More than 12 million acres of Paraguay's forests have been cleared, and some people estimate that within only a few years the country will lose all of its forests. This creates a number of problems, such as loss of watershed. This means the natural filter provided by a forest and its soil is lost. Rainwater runs off the land more quickly without vegetation to deter it, and this causes soil erosion. So when the rainwater reaches streams and rivers, it is clouded with silt and contaminated with parasites from the waste of humans and animals that live or work in the area. The land has less ability to store water, and rivers become thick with mud, causing worse and more frequent flooding. Less clean drinking water is available. There is a loss of scenic beauty and wildlife. Medicinal plants are lost. The productivity of the land is reduced, and crop yields are less. This means fewer jobs and less income.

Yet, people need to be able to clear land to raise enough food to feed their families and to earn an income. In order to raise enough crops to sell or to clear land to graze cattle for export, more land must be cleared. In addition, in many areas the only fuel for home heating or cooking is wood. Further, other countries will pay good prices for the beautiful hardwoods found in Paraguay's forests. People want to sell these products to earn enough for a better life.

Activities:
1. Have students complete the Deforestation Decision Tree worksheet on p. 68.

2. Read "Preserving a Paraguayan Paradise." List and discuss effects of deforestation on land, on people and on animal life, based on the article, on background information, and on student knowledge of conservation issues.

3. After the discussion, ask students to re-think the decisions they made and make changes on their Decision Tree worksheet. Have students write about why they made changes (or did not).

Further Activity:
In your state or region's history, what decisions were made about use of forest resources in the past? What effects did they have? Are such issues being decided today? Find out what advocates on both sides of such issues are saying, then write a letter to your Congressperson stating your position.

Extension:
Find out from your Volunteer whether deforestation is an important environmental issue in his/her country.

Compulsory Democracy?

Focus:
Exploring democracy as practiced in another culture. (Standards 4, 10)

Background:
Paraguay is a fledgling democracy. After a long history of dictatorship and a 35-year reign by a single man (General Alfredo Stroessner), a coup in 1989 led to the institution of a constitutional democracy. Juan Carlos Wasmosy is the current elected president. Suffrage in Paraguay is universal (to all citizens over 18) and is compulsory. All voters are required to vote.

Activity:
Discuss Paraguay's compulsory suffrage with students. Do they see any advantages to this system? Disadvantages? How would such a law affect politics in the United States? In your locality?

Extension:
What form of government does your Volunteer's country have? How are leaders chosen, and by whom?

Tales of the Chaco

Focus:
Investigating the ways in which indigenous tales of the Chaco region of western Paraguay reflect that area's unique flora, fauna, weather and terrain. (Standards 6, 15, 17)

Resources:
Tales of the Chaco, p. 70.

Background:
In sharp contrast to the heavily forested lands east of the Paraguay River, the western reaches of that country feature a semi-arid, flat, low-lying terrain of scrub vegetation and swamps. The region, called the Chaco, takes its name from a word meaning, "hunting ground." Peccary, rhea, deer and smaller game animals, as well as ducks and other water birds, are native to the area. The people of the area had to be ingenious hunters, gardeners, fishers and gatherers in order to survive in an environment where winter droughts alternate with disastrous summer floods. The highest temperatures in South America (115 degrees F) have been recorded in the Chaco region, but frosts can occur in the area as well. The ancient stories of the area reflect the struggle for survival in a region that continues to challenge its human inhabitants.

Activities:
1. Read "Tales of the Chaco," p. 70.

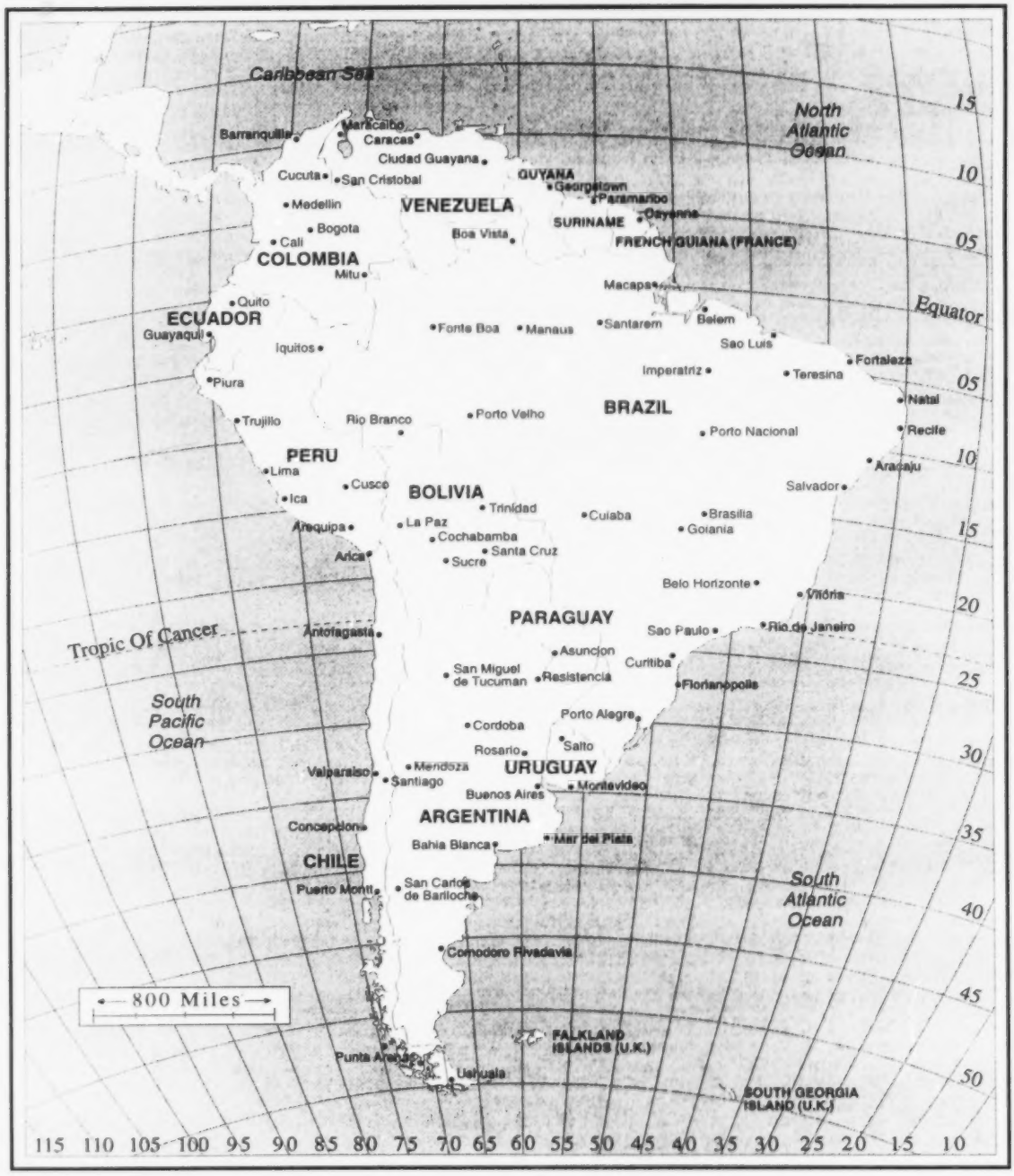
2. Answer the discussion questions on p. 71.

Further Activities:
1. Are there some areas in your state or region where natural living conditions are harsher than in others? Do population ratios reflect this? Find quotes from people who live in a particular area of your state. What do they have to say about living where they do? Do their attitudes sound similar or different to those expressed by Chaqueños? Would you be willing to take on the challenges of living in the area (if you don't already)? If you do live there, would you prefer another part of your state? Why or why not?

2. Research stories of the Native Americans from your region. In what ways do the tales reflect the natural world and the geography of the area? Invite a Native American storyteller to your class.

Extension:
Ask your Volunteer if there are strong geographic contrasts in his/her country. How do these differences affect people's daily lives? Are there stories told that reflect about geography, climate, plants or animals of the region?

South America



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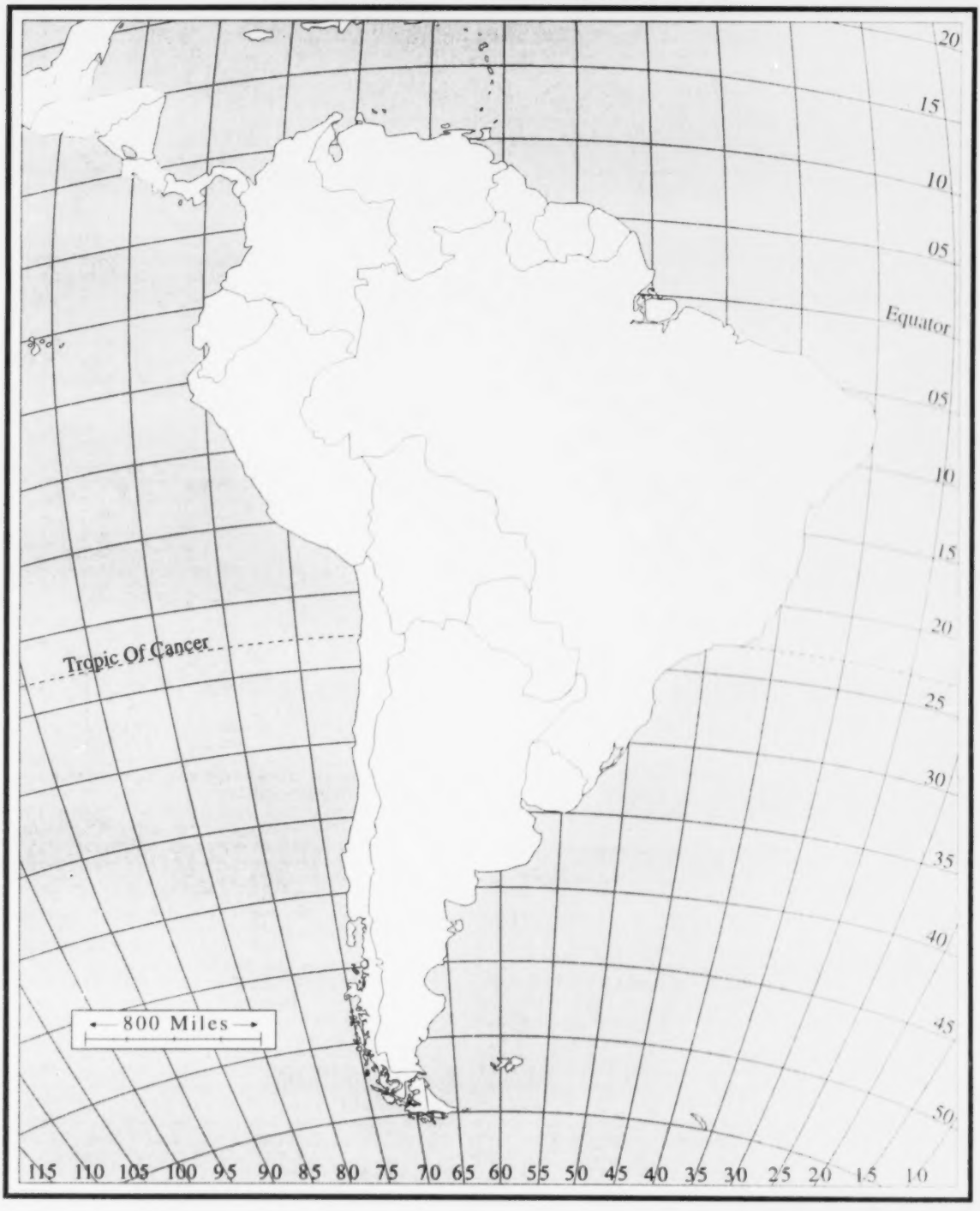
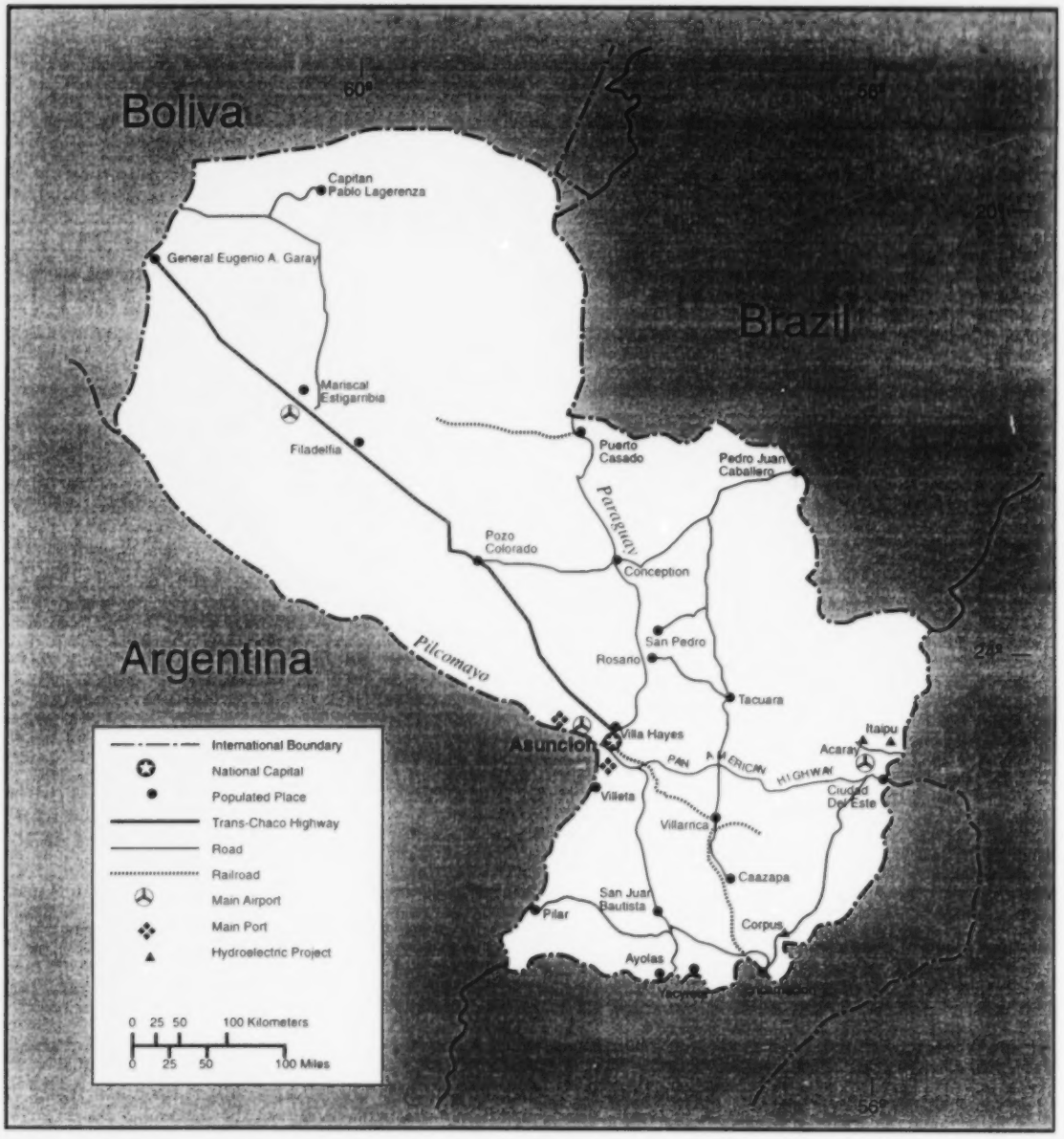
South America



Transportation in Paraguay



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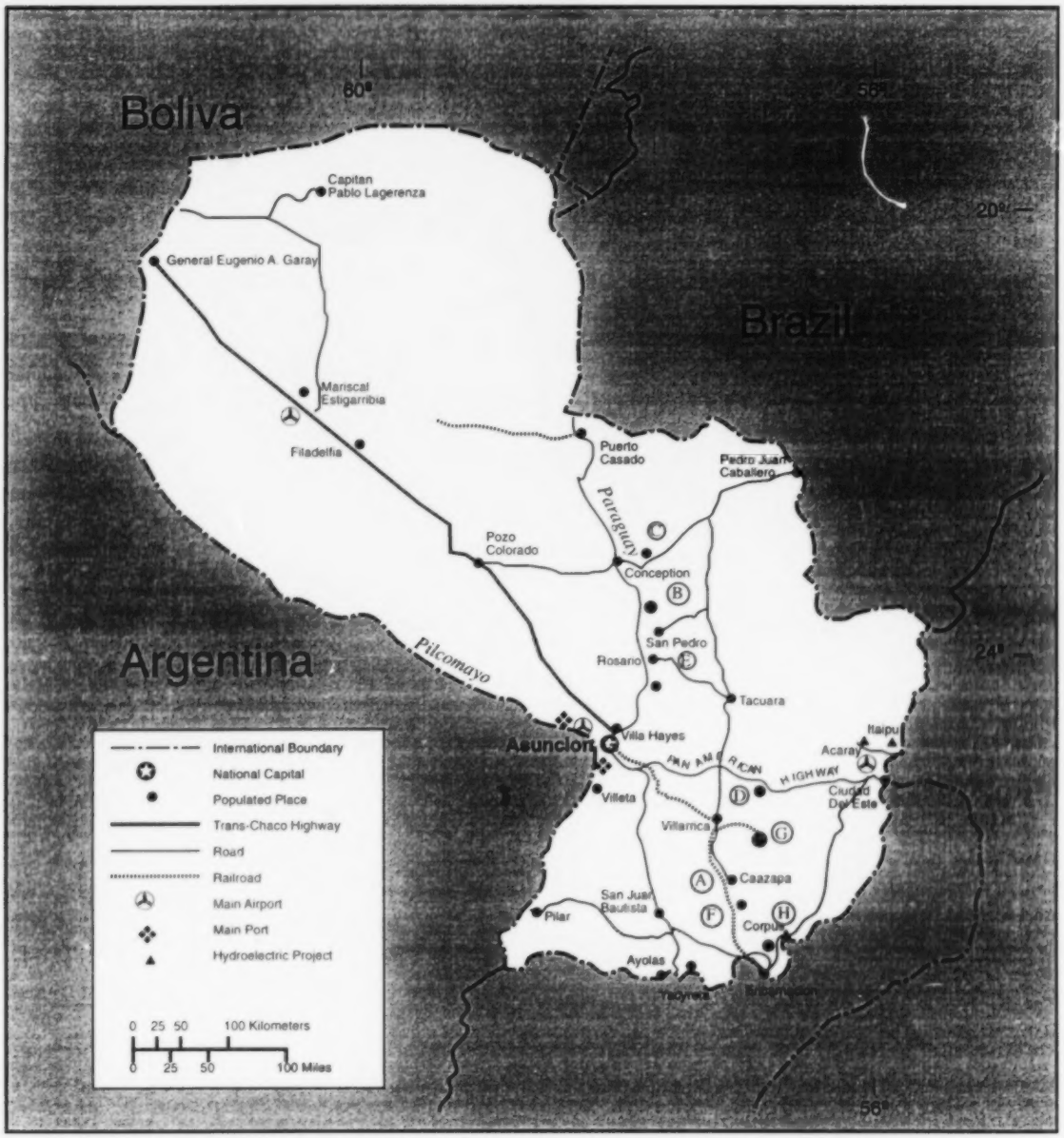
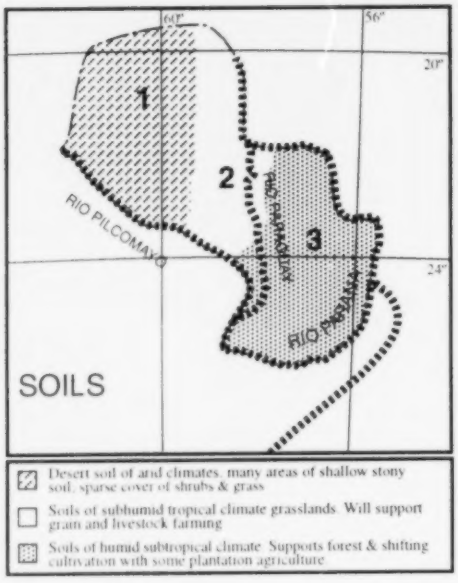
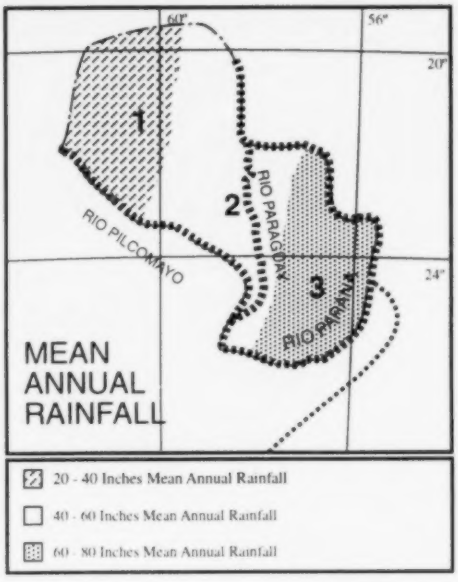
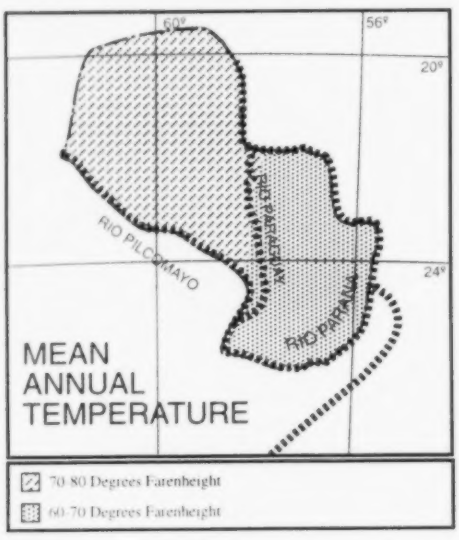
Site Location Key

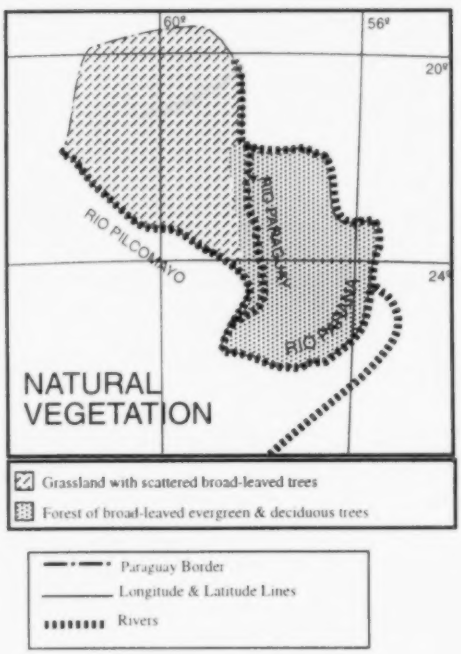


PARAGUAY









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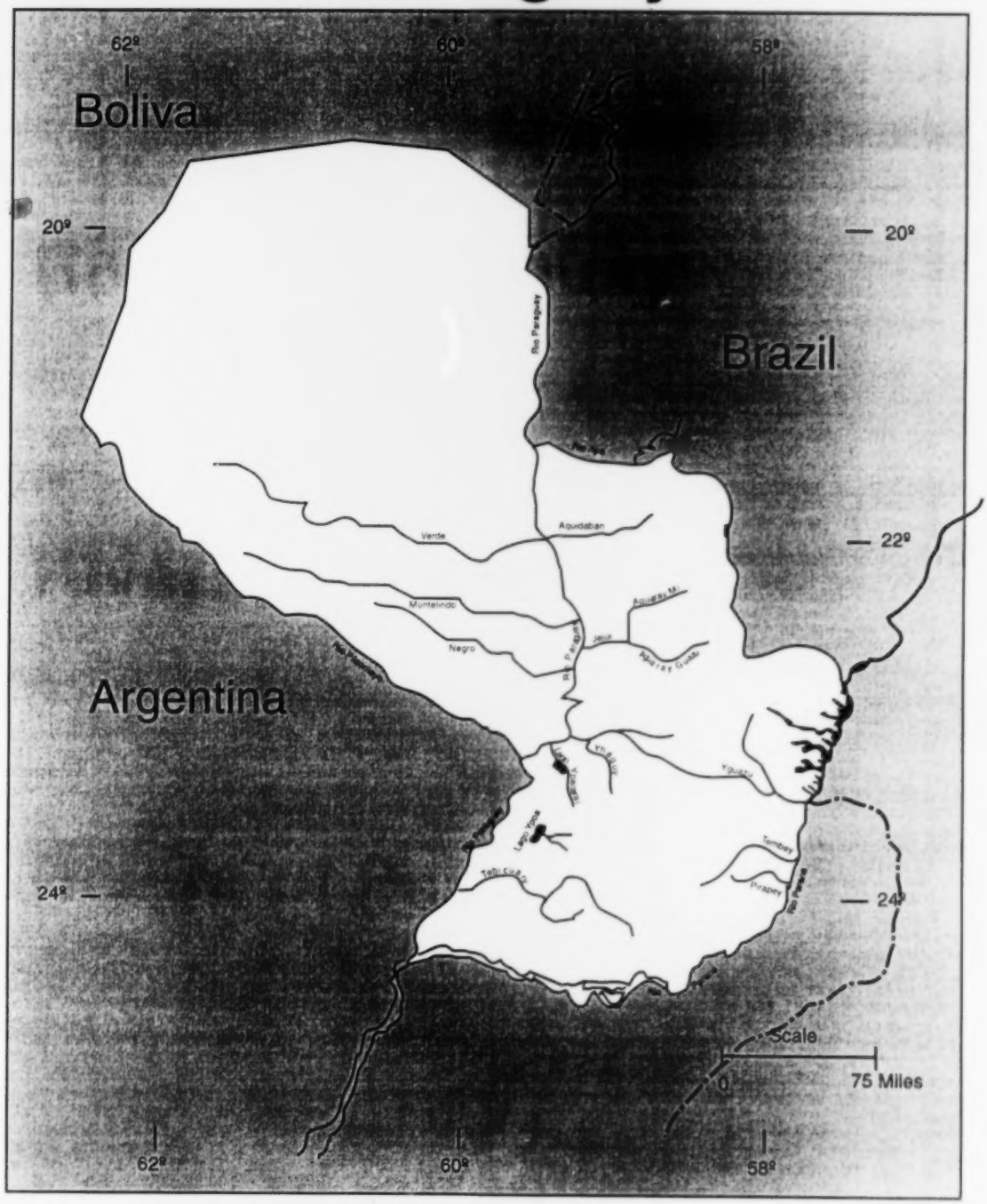
Rivers of Paraguay



Population Centers in Paraguay

Hydrovia

BOLIVIA
Puerto Suarez
Paraguay
Brasilla
Parana
PARAGUAY
Rio de Janeiro
BRAZIL
Asuncion
Parana
ARGENTINA
South Atlantic Ocean
Parana
URUGUAY
Nueva
0 K 50
Buenos Aires
Montevideo
River Plate

Where in the World Are We Going and How in the World Will We Get There?

Using a map of South America and a map of the world, answer the following questions.

1. Chile, Argentina, Uruguay and Paraguay are located in a region of South America known as the Southern Cone. Look at a map and guess why it was given that name. Write your guess here.

2. What countries share borders with Paraguay?

3. Which countries of South America are landlocked? Finding an easily accessible route to the Atlantic has always been important to those countries. Why do you think that is so?

4. Using a string and a world map or globe, mark a straight line between the airport nearest your community and Asunción, Paraguay. If you took an airplane flight following that direct route, what countries and bodies of water would you fly over?

5. Do you think an airplane would follow that route? Why or why not? How could you find out?

6. Locate the Paraguay River. A Paraguayan writer calls it "the liquid spinal cord of my country." Think of what the spinal cord does for the human body. List two or more ways that this river is like a spinal cord. List ways it is unlike a spinal cord.

7. Using the cardinal and intermediate directions (N, S, E, W, NW, SW, NE, SE) complete the following:

Suriname is _____ of Paraguay. Chile is _____ of Paraguay.

Colombia is _____ of Paraguay. Paraguay is _____ of Uruguay.

8. What mountains lie to the west of Paraguay?

Some Peace Corps Volunteer Jobs in Paraguay

Agriculture:
Volunteers work with small farmers to improve crop production. They educate about how to improve the soil, how to use safe pest control, and how to prevent soil erosion. Some Volunteers help farmers in setting up beekeeping operations.

Small Business Development:
Volunteers work with small business owners to help them figure out how to run their businesses more efficiently and profitably.

Environment:
Volunteers work with people who teach about conservation and about how to use the land without destroying the habitats of the many species of plants and animals which live there.

Public Health:
Volunteers work with Paraguayans on nutrition, disease prevention and hygiene.

Education:
Volunteers work as teachers and as teacher trainers and help to plan effective ways to teach.

Field Guide Page Format

Illustration:

Name of animal:

Description:

Habitat (where it lives):

Source of water:

Source of food:

Shelter:

Amount of space it needs:

Natural enemies:

Other interesting information:

Peace Corps Volunteers on Life in Paraguay

To prepare for the filming of *Destination: Paraguay*, Peace Corps Volunteers were asked to fill out a questionnaire describing life in the communities in which they lived. Many of them described a typical school day for children in their communities. These descriptions, of course, represent their personal points of view.

Denise L. Graham, Rural Health Extentionist, Planta Urbana

[Planta Urbana] is one dirt road, 8 km. long, with 116 houses and approximately 860 people. Virtually all of these houses are made of wood with thatched roofs and dirt floors. It is a rural community which has a primary school and a church...The population is made up of [farmers]. Their crops are for consumption and subsistence. Two tiny *almacenes*, or general stores, supply other items. There is no electricity and no running water.

A family [I know] is a family of 16, a slightly large family, even for rural Paraguay. The family consists of the Señor R___, Señora E___ and their 14 children (5 girls and 9 boys), ranging in age from 26 years to 11 months. They are a very humble, Christian family. The four oldest children (3 girls and 1 boy) are married, and therefore, do not live at home. The remaining 10 children live with mom and dad in a two-room, wooden house with a thatched roof and dirt floors. They wake up around 5 a.m. and work, in shifts, in their fields. Some of the children go to school in the morning and work after lunch, and the others, vice versa. In this respect they are an average family, but what is unusual about this family is that I've often seen the boys washing and ironing their own clothes....

The primary school was built with funds from the Paraguayan Ministry of Education and the Peace Corps Partnership Program. It is made of bricks and has a tiled floor and roof. ...It has ...3 teachers and 3 classrooms, which are used to teach six grades (1st, 3rd, 5th in the morning; 2nd, 4th and 6th in the afternoon).... The school year starts in March and ends in December. There is a two-week winter break in July. Some school subjects include: communication, mathematics, health, P.E., etc. which are all very similar to the U.S. However, something a little different is what is called *hora de trabajo* or "work hour"...[I]t's an hour reserved for the children to go to the school garden and hoe up the weeds, take all the chairs out of the classrooms and scrub the floors and walls or something of the like. There is barely enough money in the system to keep a sufficient amount of teachers working, let alone enough to hire a janitor.

The only afterschool activity I know of is an occasional soccer game for the boys, but they usually go straight home in order to do their chores. Most girls rush home to take care of their younger siblings and help with other chores as well....

[A typical day for kids in the community is] up at dawn, work till noon, eat lunch, then off to school till 5 p.m. Or, up at dawn, school till noon, eat lunch, then off to work till 5 p.m. Work may include planting and harvesting, weeding a garden, feeding (or watering) domestic animals, cleaning the patio, washing the clothes, fetching firewood, carrying water, bathing younger siblings, and cooking. There is little time for play, but the monotony is broken up with frequent trips to the general store to buy pasta, rice, or other necessities.

[For fun] the men play a lot of soccer, and they seem to play a lot of "games of chance" like cards, Bingo, horseracing, etc. The children play games as well. *Tikichuelas* is something similar to jacks, but they use rocks as jacks and a small unripened fruit called "guavira" as the ball. Boys also play soccer, handball and even volleyball. Girls rarely play sports but spend a lot of time with younger siblings and seem to turn it into fun by playing "house" and making believe that a little brother is really a son. Women have even less free time, but they enjoy what free time they have by visiting other women....They often band together to bake a batch of *chipa* or *sopa* (typical foods), or pile a basket of dirty laundry on their heads and hustle down to the river to do their wash together.

Amy Barrett, Early Childhood Education, Carapeguá

I live in Carapeguá, a city with a population of 4,000. The houses vary, depending on the economic level of the owner, but most are made of brick, covered with stucco and have tile roofs. Carapeguá is the center of *Poyri* or weaving. Hammocks, beadspreads and rugs are made all around my town and surrounding rural areas, on homemade looms.

I associate most with the family of my friend, N__. N__, 20, lives with three of her five brothers, her widowed mother and her mother's godson. Although of limited means, they are the most generous people I have encountered here. I always joke that going to their house is better than going to the *mercado* (market) because they never fail to send me home with a bag of food. They are a typical Paraguayan family in their traditional gender roles, traditions, and the fact that they've taken in another child (the godson) so that he can go to school in the pueblo. One of N____'s brothers works in Argentina and sends money to his mother. This seems to be common.

In my town there are three primary schools and two high schools.... Paraguay, although going through an education reform, is still a largely blackboard/copybook, rote learning society. The children study math, reading, grammar (Spanish), and science. They may or may not have phys ed., art or music, depending on the school. The school year goes from March to November with a winter break in July. Children either go to school in the morning or the afternoon. The students play or help out at home after school.

When not in school the kids in my community play outside, ride bikes or watch T.V. Many children help out with household chores (much more than U.S. kids) and help take care of younger siblings. The girls might crochet or embroider, too. Their days sometimes start very early. My 12 year old neighbor usually gets up at 4:30 a.m. to prepare *maté* for her parents.

Erin Marie Daly, Rural Health and Nutrition Extensionist

My community is located near a mountain and it's a gorgeous view.... The dirt is very red and due to a large amount of erosion, steep inclines of red rock and soil rise beside the narrow roads. My community has about 1,000 people and the homes are mostly made of wood with dirt floors and thatched grass roofing. The primary industry is [growing] sugar cane for making liquor. The dwellings and people are very similar to [those in other areas of] Paraguay, but much of Paraguay is flat and my area is mountainous with a lot of forestation.

My school is a primary school with grades 1 - 6 and a preschool on Tuesday and Thursday afternoons. There are a total of 280 kids in the school, ages ranging from 5 years to 12 years. Half of the grades, (1, 3, 4, 6) go to school in the morning and then another set (2, 3, 4, 5) go in the afternoon.... Math, social studies and Spanish are some of the subjects taught. Everything is memorization.... School year goes from February to October. The school is made of wood with thatched roofing. Each class has one room. They are, however, building 2 new school rooms, but funds are low so they have not yet finished them.... They have a huge garden that we just finished planting with the kids.... During recess, they play soccer or jump rope and each child gets a warm glass of powdered milk to supplement their diets. [There are] no after school activities, so to speak.

The kids get up very early to help the family do chores like milk the cow, feed the chickens or pigs, go to the local store to buy noodles or eggs or flour. Then they go to school for half a day, come home and play or help out some more at home.

For fun there are many soccer games for the teenagers (but not for the little kids or girls). Everybody likes to go. Sometimes there are dances that the young adults like to go to (but the parents always have to chaperone). Mostly people socialize at church or at community meetings that have to do with bringing electricity to the site or building a health post for the community.

Roberta Cavitt, Primary Education Teacher, San Lorenzo

[My community] is a typical large city in Paraguay, a suburb of Asunción. The population is 147,000 (it's the second largest city in the country). The dwellings are brick houses with tile roofs. There are many merchants and factories which make dairy products, soap, cola, leather, plastics, cold cuts).

There are two elementary schools that I work with. Kids attend half a day. They take a snack for recess or buy snacks (hot dogs, *empanadas* [meat pies], popcorn, sandwiches, candy, Coke, juice, etc.). Most of class time is spent copying information off the chalkboard into their notebooks. Usually students have short homework assignments each night. Wednesdays they have clubs (dance, sports, nature, shop, etc.). Grade school playground games include (for boys) marbles, soccer, cops/robbers and (for girls) jump rope, a form played with long rubberbands.

Grades 7-12 are also present. Seventh, eighth and ninth grades are general education; tenth, eleventh and twelfth are either "humanities" or "commercial," depending on what career you want later. Besides gym class, games are organized once a year in September or October. It is a form of intermurals and covers everything from chess, debate, ping pong, dance to soccer, tennis, track, etc.

A typical day for children in my community: wake up at 6 a.m.; go to school, 7-11 a.m.; lunch (big meal) at noon; in the afternoon, do homework, play with friends, do chores, watch T.V. Five p.m. is snack time. In the evening is bath time, finish homework, watch T.V., talk with family.

For fun, young people watch T.V., play volleyball, go to rivers and streams on the weekends and visit family.

ALELUYA!

Aleluya!, written and illustrated in 1993, is a product of school children of Villa Salvador, Paraguay. The artists were (with ages at the time of the project): Anatalia Maribel Barrios (10), Gustavo Daniel Benitez (8), Victor Hugo Bogarin (11), Cinthia Raquel Díaz (12), Ninfa Magdalena (6), Herver Inocencio Mercado (12), Lidia Susana Noguera (6), Andrea Ocampo (5), Myriam Celeste Torres (10), Arnaldo Ramon Vera (6). The children worked with their teacher, Doris Martha Presentado, and with a Peace Corps Volunteer, Hesh J. Kaplan, to produce the book. It was written in Guaraní and published in both Guaraní and Spanish. (The illustrations are not reproduced here.)

Aleluya! (in Guaraní)

Emaña ko arapyre
Renemity ramo pype
Ha reñohê ramo y hese
Ha ohesape ramo hese kuarahy
Ha'e okakuaáta
Ha guyrakuera okaruta hese
Ha mitânguéra avei okaruta hese
Ha che jaryiha che taita opurahei aleluia
Ha...
Tatpe rehapyrô ko arapy
Ha rembyai ramo yty ha pohavaipe
Haseta ko arapy
Ha mitanguéra omanombata

Aleluya! (in Spanish)

Mirá el mundo
Cuando vos sembras las semillas encima de él
y cuando derramás el agua encima de él
y permitís el sol resplandecer encima de él
él va a crecer
y los pajaros van a alimentarse encima de él
y las abuelas los abuelos cantan aleluya
pero
cuando quemas con fuego al mundo
y cuando lo envenenas
el mundo va a llorar
y los niños van a morir

Alleluia

Look at the world!
When you sow the seeds on top of it;
when you water it
and allow the sun to shine on it,
it'll grow,
and the birds will feed themselves from it,
and the children will eat from it,
and the grandparents will sing, "Alleluia."
But
when you burn the world
and when you poison it,
the world will weep
and the children will die.

Pollution Information Sheet

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TYPES OF POLLUTION

SEDIMENTS
Particles of soils, sand silt, clay and minerals wash from land and paved areas into creeks and tributaries. In large unnatural quantities these natural materials can be considered a pollutant. Construction projects often contribute large amounts of sediment. Certain lumbering practices affect sediments in runoff. Sediments may fill stream channels and harbors that later require dredging. Sediments suffocate fish and shellfish populations by covering fish nests and clogging the gills of bottom fish and shellfish.

PETROLEUM PRODUCTS
Oil and other petroleum products like gasoline and kerosene can find their way into water from ships, oil drilling rigs, oil refineries, automobile service stations, and streets. Oil spills kill aquatic life (fish, birds, shellfish and vegetation). Birds are unable to fly when oil loads the feathers. Shellfish and small fish are poisoned. If it is washed on the beach, the oil requires much labor to clean up. Fuel oil, gasoline and kerosene may leak into ground water through damaged storage tanks.

ANIMAL WASTE
Human wastes that are not properly treated at a waste treatment plant before being released to water may contain harmful bacteria and viruses. Typhoid fever, polio, cholera, dysentery (diarrhea), hepatitis, flu and common cold germs are examples of diseases caused by bacteria and viruses in contaminated water. The main source of this problem is sewage getting into the water. People can come into contact with these microorganisms by drinking the polluted water or through swimming, fishing, or eating shellfish in polluted waters. Often unexpected flooding of barnyards or stock pens can suddenly increase the toxic effects of animal waste in water. Animal waste can also act as a fertilizer and create damage by increasing nutrients. (See FERTILIZERS.)

ORGANIC WASTES
Domestic sewage treatment plants, food processing plants, paper mill plants, and leather tanning factories release organic wastes that bacteria consume. If too much waste is released, the bacterial populations increase and use up the oxygen in the water. Fish die if too much oxygen is consumed by decomposing organic matter.

INORGANIC COMPOUNDS
Detergents, pesticides and many synthetic industrial chemicals are released to waterways. Many of these substances are toxic to fish and harmful to humans. They cause taste and odor problems and often cannot be treated effectively. Some are very poisonous at low concentrations.

INORGANIC CHEMICALS
Inorganic chemicals and mineral substances, solid matter, and metal salts commonly dissolve into water. They often come from mining and manufacturing industries, oil field operations, agriculture, and natural sources. These chemicals interfere with natural stream purification; they destroy fish and other aquatic life. They also corrode expensive water treatment equipment and increase the cost of boat maintenance.

FERTILIZERS
The major source of pollution from agriculture comes from surplus fertilizers in the runoff. Fertilizers contain nitrogen and phosphorous that can cause large amounts of algae to grow. The large algae blooms cover the

water's surface. The algae die after they have used all of the nutrients. Once dead, they sink to the bottom where bacteria feed on them. The bacterial populations increase and use up most of the oxygen in the water. Once the free oxygen is gone, many aquatic animals die. This process is called eutrophication.

HEATED OR COOLED WATER

Heat reduces the ability of water to dissolve oxygen. Electric power plants use large quantities of water in their stream turbines. The heated water is often returned to streams, lagoons or reservoirs. With less oxygen in the water, fish and other aquatic life can be harmed. Water temperatures that are much lower than normal can also cause habitat damage. Deep dams often let extra water flow downstream. When the water comes from the bottom of the dam, it is much colder than normal.

ACID PRECIPITATION

Aquatic animals and plants are adjusted to a rather narrow range of pH levels. pH is a measure of the acidity of a solution. When water becomes too acid, due to inorganic chemical pollution or from acid rain, fish and other organisms die.

PESTICIDES, HERBICIDES, FUNGICIDES

Agricultural chemicals designed to kill or limit the growth of life forms are a common form of pollution. This pollution results from attempts to limit the negative effects of undesirable species on agricultural crop production. Irrigation, groundwater flow, and natural runoff brings these toxic substances to rivers, streams, lakes and oceans.

Worksheet 1: AGRICULTURE IN PARAGUAY

Setting:

You and your family, like almost half the population of Paraguay, cultivate a small farm of 10 hectares. (A hectare is equal to 2.471 acres.) The land is rich, and with attention and hard work, it will grow most of the food your family needs. Seeds are saved from one year's crop to plant for the next. Your family lives in a small, close-knit community. In bad times, such as floods or drought, everyone faces the same crisis, and normally the community shares what they have. They pool their labor to do the heaviest work. Little cash is available, but little is needed. You've built your own house and outbuildings with locally available materials and with help from your family and neighbors, so there is no rent or mortgage payment. Plenty of public land is available for settlement at no cost, so if your soil wears out or if your family grows larger, there will be more land to cultivate.

The Problem:

The government has sold large amounts of available public land to people who want to practice large-scale agriculture. They will cultivate just one or two crops for sale (such as cotton or soybeans) and for export, instead of growing just what is needed for their own families. To work all this land, they will hire laborers from nearby communities. Less and less land is available for small farmers. Some of your neighbors are evicted; the land they have been cultivating is sold. You and some others may be able to secure your land with legal deeds of title, but cash is required to do this.

A cash crop, such as cotton, is needed in order to earn money, but this requires even more money to pay for seeds, insecticides, and other supplies. How would a family get this money? What decisions could they make?

Alternative 1: **Take temporary work as a day laborer on a large farm nearby.**

Good consequences (alternative 1)

Bad consequences (alternative 1)

Alternative 2: **Promise your first cash crop to a middleman or broker. He will pay only a small price, but he will lend you the money for seed, etc.**

Good consequences (alternative 2)

Bad consequences (alternative 2)

Decision:

Worksheet 2: AGRICULTURE IN PARAGUAY

(Do with entire class.)

No one choice is right for every family. Whichever choice you made, you were able to buy seed. However, planting cotton means less of your land is now available to grow food.

If you went to work for wages, you have less time to farm your own land. So now you and your family have to buy more of life's necessities, including food, which means you need even more cash.

The terms negotiated with the middleman (if you made that choice) leave you with less profit than you need to cover cash expenses for extra food and for seed, etc. for the next cotton crop.

Some of your neighbors move to the cities in an attempt to find permanent work, but many are not successful. The community is disintegrating; fewer people are available to do the heavy work that was shared in the past, either because they have moved away or because they are working for wages on large farms.

MEET WITH YOUR NEIGHBORS AND RELATIVES AND BRAINSTORM IDEAS FOR SOLVING YOUR COMMUNITY'S PROBLEMS. First, decide which situation to react to first, second, third and so on. Number them accordingly. Then come up with a course of action for each.

A. _____ Families will need (on average) 81,000 guaranis a year for EACH hectare used for a cash crop. ($1 = G1,447) This covers cost of seed, tools, insecticide, veterinary supplies, harvesting bags, etc.

B. _____ One hectare of cotton requires approximately 100 days of work.

C. _____ Large-scale farmers often have better access to experts who can offer the latest information on methods of getting better production from the land.

D. _____ A family can earn approximately G1,000 per day by growing cotton; slightly less by doing day labor on a large farm. Fluctuations in market prices or unpredictable weather can wipe out a year's cotton profits overnight.

E. _____ It takes approximately 120 days of work to grow enough food for each family.

Worksheet 3: AGRICULTURE IN PARAGUAY

(Do in small groups.)

MEET WITH YOUR NEIGHBORS AND RELATIVES AND BRAINSTORM IDEAS FOR SOLVING YOUR COMMUNITY'S PROBLEMS. You have already prioritized the first five items on Worksheet 2. Now decide which of these situations should be reacted to first. Label that situation #6 and prioritize the rest through to #10. Then come up with a course of action for each.

F. _____ Farms which produce a large cash crop can negotiate better prices for what they produce.

G. _____ Family farmers cannot afford to hire extra help in order to plant and harvest more cotton.

H. _____ Middlemen will lend money for seed and other supplies, but only if farmers sell their crops to these brokers at rates cheaper than the market price.

I. _____ It is hard to compete with large producers of cotton because they can afford machinery and other expensive equipment.

J. _____ Large-scale farmers can buy supplies in bulk, thus saving money; individual families cannot do this.

Worksheet 4: AGRICULTURE IN PARAGUAY

Agronomists, social workers and family farmers in several regions of Paraguay have worked together through several agencies to find solutions to the problematic situations described on the previous worksheet. Listed below are the actions they took.

There is no single correct order for dealing with the situations, although all the agencies dealt first with issues of self-sufficiency (enough food), then with the need for cash to grow a market crop, and finally with issues of cooperative work, buying and market negotiation. The numbers given are based on the approximate order in which the agencies tackled the problems.

Compare these priorities and solutions with the ideas you came up with on Worksheets 2 and 3.

A. __3__ Loans of G40,000 to G60,000 were made available to each household so that tools, seeds and other supplies were more easily available.

B. __4__ In order to qualify for loans, families had to present plans that showed how they would provide for their own food needs first, before undertaking to grow a cash crop.

C. __2__ Agronomists hired by the projects worked with local families and committees to increase productivity of the small farms and to develop production plans and record-keeping for each participating farm household.

D. __5__ Wage labor seems more attractive in some ways than growing cotton (or other cash crops) for making up a family's cash shortfall. However, most project organizers argue that since most rural jobs are tied to the agricultural cycle, families often end up by neglecting their own fields and thus endangering their major food source. They encouraged small farmers to look for day work that didn't interfere with their own farming.

E. __1__ Families were encouraged to remain self-sufficient so that enough food would be available even if cash crops failed. If they decided to "hire out" to earn cash, they tried to do so only on days when their own crops did not demand attention.

F. __10__ Local and regional committees were able to band together to negotiate more favorable terms from merchants and refineries.

G. __6__ Local committees were formed. They built on the traditional values of sharing major tasks with relatives and neighbors, as well as sharing resources in times of need. Committee members provided a "safety net" for one another. Some agreed to save part of each family's profits to go toward community emergencies, such as rebuilding a home after a fire.

H. __7__ With some of the necessary cash available through loans, less was needed from the middlemen. Also, the local committees could work together to negotiate more favorable terms.

I. __9__ It is hard to compete with large producers of cotton because they can afford machinery and other expensive equipment.

J. __8__ The projects offered technical expertise to local committees so that they could buy and sell in bulk quantities. Some communities were able to establish successful cooperative stores, in which members could buy merchandise at reduced prices and obtain credit.

Sources: Richard Reed, "Making Paraguay's Agricultural 'Miracle' Work," *Grassroots Development* (9, no. 2, 1985); Marcus E. Lower, "Paraguay: Agricultural Situation Report—1990," (U.S. Department of Agriculture: Report #PA1007, 1991).

School Comparison Chart

	My School	Rural Paraguay	Urban Paraguay
At-home routine before school			
Transportation to school			
Hours of school			
Subjects			
After school activities			

Information Retrieval Sheet: *Destination: Paraguay* Video

Compare and contrast urban and rural living in contemporary Paraguay.

	Urban	Rural
Housing		
Occupations		
Schools		
Transportation		
Entertainment		
Other		

"Nueva Minneapolis del Sur"

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from our Argentina Correpondent

Though free trade treaties and tariff reductions are uniting Latin America, a grand new waterway may yet do more than any of them. For more than 3,200 kilometres (2,000 miles) the rivers Paraná and Paraguay flow from the empty lands of Bolivia and Brazil, skirt Paraguay and reach the River Plata between Argentina and Uruguay. The rivers are for nine months of the year barely navigable. The five countries along their course are now planning, with dredges and embankments, to transform them into the Hydrovia, a year-round commercial waterway rivaling the Mississippi.

The upstream terminus would be at Puerto Suarez in Bolivia, near the center of the continent; its downstream end at Nueva Palmira in Uruguay, near the great cities of Buenos Aires and Montevideo and the open sea. Dredging and port improvements would be necessary all along the course, particularly in Paraguay and Brazil. Guesses at the cost of enabling real cargoes to move along this glimmer in the engineers' eyes range from $1 billion to $2 billion.

International lending institutions might be willing to pay for preliminary work, but the five governments realize that doing the job would depend on private-sector investors. With five state bureaucracies involved, much persuasion will be needed. Moreover, if the scheme is to pay, much more will have to be spent on roads and railways to the river ports. Environmentalists will be on the watch for damage to wildlife and disturbance of Brazil's unique marshes.

The four downstream governments, already committed to working together in Mercosur, their regional common market, relish the idea of cutting transportation costs up to a third. Bolivia, landlocked and outside Mercosur, would gain most; huge undeveloped tracts of northern Paraguay and south-central Brazil would be opened to farming and commerce, transforming cities now unheard of into rivals for Kansas City and Minneapolis. That's the idea, anyway.

Note: the map which accompanied this article has been redrawn on p. 50 of this guide.

Deforestation Decision Tree

Situation:

You and your family have 60 hectares of land, which you depend on for your livelihood. Ten hectares is cleared, and grows enough food for your family. Fifty hectares is forested. You rely on the trees from your forested lands for fuel, since your house has no electricity. Your family has adequate food, clothing and shelter, but everyone must work hard and there are no luxuries, such as running water, in your home.

If you clear more land to grow soybeans for export, your family will have more money available for the extras. However, you also are aware that forested lands are rapidly disappearing in your area. You've heard that this can even cause changes in climate or in the productivity of your land. You must decide whether the long-term effects are worth the short-term gains. What will you do?

Decision to be made: Will you clear forests to grow soybeans as a cash crop?

Short-term advantages of clearing the land:

Short-term disadvantages of clearing the land:

Long-term advantages of clearing the land:

Long-term disadvantages of clearing the land:

Your decision:

"Preserving a Paraguayan Paradise"

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by Henry Goethals

Deforestation, the advance of mechanized farming and lumbering are threatening the lairs of the jaguar, the tapir, the peccary and the giant armadillo in the humid semi-tropical forests of Paraguay. These forests are also home to more than 19 natural plant communities and rare birds such as the king vulture, the bare-throated bellbird and the large macaw.

To protect these animals from extinction, the Moises Bertoni Foundation, a private group, is collaborating with the Nature Conservancy and the government of Paraguay to create a reserve in the 175,000-acre Mbaracayú region. A virgin forest of rich biodiversity, the Mbaracayú is the largest single tract of essentially undisturbed forestland remaining in eastern Paraguay.

The eastern region of Paraguay, between the Paraguay and the Paraná Rivers was once covered with rich, humid, semi-tropical forests. With the expansion of lumbering and farming activities, however, the forests are rapidly receding. At current rates of deforestation, virtually all of eastern Paraguay is expected to be stripped of its forest cover by the year 2005.

The Mbaracayú reserve forms part of the 692,000 acre Jejuí watershed. It is inhabited by the Aché, an indigenous tribe of hunters and gatherers who depend upon the forests for their livelihood and who were only recently brought into contact with the outside world. Constituting the core area within the watershed, the nature reserve is designed to preserve the biodiversity of its rare animal and plant species. The future addition of some 32,000 acres could increase the area of the reserve to 175,000 acres, one fourth the total acreage of the watershed.

The buffer area surrounding the nature reserve would be developed in subsequent stages. Biologically significant areas would be identified for incorporation into the reserve and income producing activities would be promoted among the Aché and Guaraní Indian tribes around the reserve.

The Mbaracayú is probably the most significant remaining example of the *Alto Paraná* - type forest and includes specimens found in the now largely destroyed *Mata Atlántica* formation in Brazil. Some of these specimens could be important sources of germ plasma for the ecological restoration of the natural forest on degraded lands.

Tales of the Chaco

Skylore is common in the folklore of the Chaco. Tales are still told of a band of hunters who climbed a tree to the sky. An angry woman chewed through the base of the trunk, stranding them there to form a constellation we know as the Pleiades. Another tale refers to the Pleiades as an ostrich nest, with the ostrich herself to be seen in the Southern Cross. Phases of the moon were explained in a tale that told of jaguars that ate the moon.

The Fox in Chaco lore is a trickster figure, a schemer whose pranks often backfire, unless he is confronting Jaguar, who is dangerous, but stupid. Once, trying to get rid of the sleeping Jaguar, Fox tied a bag of stones to his tail and woke him up, screaming, "Hunters are coming!"

Fox is responsible for the fish in the rivers, according to a story featuring the bottle tree, a strange tree with a bulbous trunk that conserves moisture for times of drought. The bottle tree once contained all the water in the world, and with it, all the fishes. Fox stole the key to a door in the bottle tree's trunk, and foolishly opened the door. All the waters of the world rushed out, causing a great flood. Fox was drowned, but when the waters receded, the rivers were abundant with dorado, surubi and other fish.

A bird of the Chaco memorialized in folklore is the carancho, a long-legged, vulture-like hawk. In some tales Carancho is a trouble-maker; in others he is helpful to humans. Several tales tell of how he brought fire. In one version, he stole it from Anaconda. Another tale relates how people were being transformed into animals, because without fire they had to eat their food raw. A small group once planned a visit to the Master of Fire, made of flames, hoping for some cooked food. Ovenbird, who lived in the area, insisted on going along. This made people very nervous. The Master of Fire was very sensitive, and Ovenbird was known to have fits of uncontrollable giggling. The people feared the Master of Fire would take offense.

The party reached the place of the Fire Spirit, and the Master took out an enormous pot and threw beans into it. Ovenbird started to giggle, but someone threw a rag over him. The Master of the Fire hugged the pot in an embrace and the water began to boil. Soon the food was cooked. Everyone was served, but Ovenbird was overtaken again by laughter. Again, the people threw a rag over Ovenbird, but in their haste, they left a part of him uncovered. The Fire Spirit heard his titters and was enraged. As everyone fled for their lives, the Master of Fire expelled a fire storm and incinerated the riders. The fire spread through the world and burned everything.

The Moon escaped from the fire by climbing a quebracho tree. From the sky, he sent a heavy rain and the burned tree began to sprout buds. From this tree the earth was restored.

Fox and Carancho took pity on the humans and plotted to search for fire. Fox failed because of a foolish plan that involved flying with wings made from feathers glued to his fur. Carancho succeeded, and taught the people how to use a fire drill, so they could make fire on their own.

Another time a man was warned to prepare for a great cold. He gathered as much wood as he could and covered his hut with a layer of thatch. When bitter cold arrived, many people came to beg an ember from him so they could start fires. He gave embers only to those who had been his friends. People froze and were turned into ducks, herons, vultures and other birds. One man, who hid in a well in an attempt to survive the cold winds, was changed into an alligator. Others were turned into anteaters.

Tales of the Chaco feature many such story cycles of destruction followed by renewal, in which people, animals and earth must begin again.

Source: John Bierhorst, *The Mythology of South America*. (New York: William Morrow and Company, 1988).

Discussion Questions:

1. From your reading of these brief tales, what plants and animals would you expect to find in the Chaco?

2. What sorts of natural occurrences in the region might account for the disaster stories?

3. Give a possible explanation for why there are fewer skylore stories in the folktales from the forested, eastern regions of Paraguay than in the folklore of the Chaco.

4. Sandra Dibble, writing in *National Geographic* (August 1992) described the Chaco vividly: "The temperature can reach 110 degrees F every day for weeks. Some years it doesn't rain for months. Chaqueños will tell you how the wind blows, the groundwater is salty, the mosquitoes bite, the grass is bitter, the brush is filled with poisonous snakes. They'd never live anyplace else." She quotes one resident: "You fight with the climate, you fight with the land, and you get something for your fight. You don't get that in eastern Paraguay." Compare these contemporary descriptions with the picture of the Chaco painted by the ancient tales.

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